



Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

OVERVIEW

The California Women's Health Survey (CWHS) was established to collect, analyze, interpret, and disseminate information to guide decision-making about women's health by public health professionals and policymakers. The *Data Points* series is a CWHS publication that is prepared by the CWHS collaborating programs and coordinated by the Office of Women's Health. *Data Points: Results from the 2005 California Women's Health Survey* is the most recent in the series that focus on specific women's health findings based on the 2005 CWHS results.

The CWHS is a collaborative effort of the California Department of Health Services (CDHS) (as of July 1, 2007 reorganized as the Department of Health Care Services and the California Department of Public Health), California Department of Social Services, California Department of Alcohol and Drug Programs, and Public Health Institute's Survey Research Group. The Office of Women's Health and the Survey Research Group coordinate and facilitate the project, with collaborators working together to develop the survey instrument, analyze data, and distribute findings. Funding for the data collection is provided by the collaborators, and the survey is administered by the Survey Research Group. Data are collected annually through a computer-assisted telephone survey of approximately 4000 randomly selected California women. The women are interviewed anonymously in either English or Spanish. Responses are weighted in these analyses by age and race/ethnicity to reflect the 2000 California adult female population.

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Data Points

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The California Women's Health Survey (CWHS) is an ongoing annual telephone survey that collects information on a wide variety of health indicators and health-related knowledge, behaviors and attitudes from a sample of approximately 4,000 randomly selected women aged 18 years or older. The survey began in March 1997 as a collaborative effort between the California Department of Health Services, California Department of Mental Health, California Department of Alcohol and Drug Programs, California Medical Review, Inc., California Department of Social Services, and Public Health Institute. The survey is administered by the Survey Research Group of the Public Health Institute.

Survey respondents are asked about past and present involvement in health care systems, food security status, participation in government nutrition programs, prenatal care, vitamin consumption, alcohol consumption, breastfeeding, sexually transmitted diseases, intimate partner violence, and utilization of cancer screening procedures and other preventative measures. They also are asked for basic demographic information such as age, race/ethnicity, employment status, and education.

Participation in the CWHS is voluntary and anonymous. Interviews are conducted by trained interviewers following standardized procedures developed by the Survey Research Group staff and the Centers for Disease Control and Prevention. Data are collected monthly from a random sample of California women living in households with telephones. Quality control procedures are rigorous to ensure a high level of accuracy in the data collected.

Using a computer-assisted telephone interviewing system, interviewers read questions as they are displayed on a computer screen. Responses are keyed directly into the computer.

Once a household is reached, all women aged 18 years or older living within that household are eligible to participate in the survey. If more than one member of the household is eligible, one person is selected at random (using a computer-generated random selection algorithm) to become the respondent. If the person selected is not available, an appointment is made to conduct the interview at a different time or on another day. Once a respondent is selected, no other household member can be selected, even if it is not possible to obtain an interview from the selected respondent. Standardized procedures are followed for encouraging selected respondents who are reluctant to participate as well as for calling numbers for telephones that ring with no answer or give a busy signal.

Through the sampling process, the Survey Research Group attempts to collect interviews from a random sample that is representative of California's population. However, the age and race/ethnicity characteristics of the CWHS sample differ to some extent from those of the female California population. In addition, the probability of selection within a household varies depending upon the number of telephone numbers and individuals living in the household. To obtain meaningful population estimates, all analyses in this report have been weighted to the age and race/ethnicity of the 2000 California population. No adjustment is made for the observed differences in education or income. For a variable of interest, this means that if education or income of respondents

The California Women's Health Survey Methodology

California Department of Public Health, Cancer Surveillance and Research Branch, Survey Research Group Section, Public Health Institute

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varies from that of the general California population, any associations may not be captured.

Due to the limited sample size data were distributed among four race/ethnicity groups. "White" refers to non-Hispanic Whites; "Hispanic" refers to respondents who said that they were of Hispanic origin regardless of race; "Black/African American" refers to respondents who said that they were Black/African Americans; and "Asian/Other" refers to respondents who were either Asian or belonged to additional race/ethnic groups. Unless specified otherwise, comparison of behaviors and/or outcomes by the different race/ethnicity groups was not adjusted for age differences.

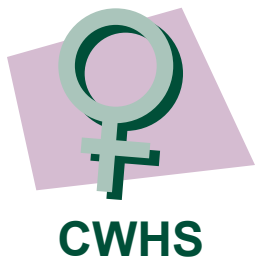
Data from these Data Points should be interpreted with caution. Due to the cross-sectional design of the CWHS, causality cannot be established between the variables because they are measured simultaneously. In addition, the survey is only completed in English and Spanish, which may exclude a portion of the population. Recall bias also may be a problem; information recall may be particularly difficult on a telephone survey. Another area of concern is that over reporting of healthy behaviors and underreporting of unhealthy behaviors is well-documented in behavioral survey research. This study is population-based, so the results can only be generalized to non-institutionalized adult women in California living

in households with telephones. However, more than 95 percent of households in California are estimated to have telephones, and the effects of non-coverage appear to be small.

Each Data Point is meant to "stand alone," with data presented based on program needs and definitions. The definitions used in one Data Point may differ from those in another.

More methodological information and a thorough examination of the representativeness of the survey sample are available from the most recent *California Women's Health Survey SAS Dataset Documentation and Technical Report*. For a copy of the most recent technical report, please contact the Survey Research Group at (916) 779-0338.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

At a time when health insurance costs are rising along with service co-pays, it is important to monitor health insurance coverage among low-income women who may lack or have irregular coverage. An estimated 2.3 million California women were uninsured or lacked health insurance for some part of the year.¹ The Kaiser Commission on Medicaid and the Uninsured concluded that without health care coverage, women are less likely to receive preventive services, are more likely to utilize services from an emergency department, and are diagnosed at more advanced stages of disease.² The commission estimated that full health insurance coverage would reduce mortality rates by 10 percent to 15 percent.

To better understand the status of health insurance coverage for women in California, the combined 2004-2005 California Women's Health Survey dataset was analyzed. Only women aged 18 to 64 years were used for the analysis ($n = 7,644$). Women with low household incomes were found to be the most likely to lack health insurance coverage.^{3,4} Low-income respondents—from households with income below 200 percent of the federal poverty level (FPL)—were far less likely to have had any health insurance over the previous 12 months (21.2 percent were uninsured) compared with women in households with incomes above 200 percent of the FPL (4.5 percent were uninsured; chi-square test, $P < .0001$).

Among respondents who currently had health insurance, more women with low household incomes indicated that they had been uninsured at some point within the previous 12 months (i.e., had a "coverage gap") than respondents with household incomes above

200 percent of the FPL (14.5 percent vs. 5.9 percent; chi square, $P < .0001$).

Low-income respondents, on average, were nearly five years younger and had more children living in the household compared to respondents with household incomes above 200 percent of the FPL (1.4 vs. 0.74 children). Nearly one-quarter of respondents (23.7 percent) were either uninsured or indicated that they had gaps in insurance coverage.

Rates of employment-based health insurance coverage varied by income status: 17.9 percent of women at or below 200 percent of the FPL had coverage from work vs. 47.0 percent of women with higher incomes. Of women who reported that they worked full-time, 7.9 percent had gaps in coverage, and of those, most were above 200 percent of the FPL (62.8 percent). However, of women who reported they worked full time, 5.5 percent were without health care coverage for more than one year, and almost three-quarters of those respondents were below 200 percent of the FPL (74.7 percent). The following table further illustrates types of health insurance coverage by household income status.

Health Insurance Coverage among California's Low Income Women, 2004-2005

California Department of Public Health, Cancer Surveillance and Research Branch, Survey Research Group Section, Public Health Institute

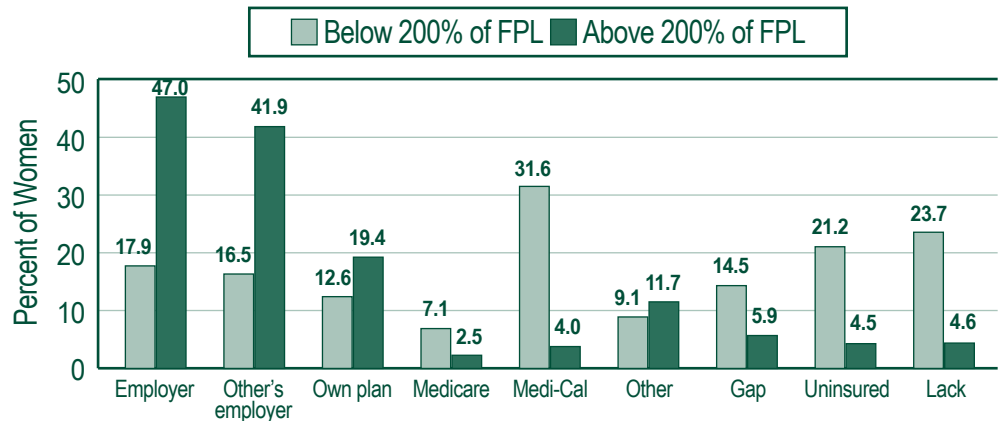
Public Health Message:

Almost one in four low-income California women had insufficient health care coverage in the previous year, and almost one in five was fully uninsured. California's low-income women tend to be younger and have more children living in their household than women with higher incomes, and they are also more likely to lack health insurance coverage.

Health Insurance Coverage among California's Low Income Women, 2004-2005

California Department of Public Health,
Cancer Surveillance and Research Branch, Survey Research Group Section,
Public Health Institute

Type of Health Insurance Coverage Among California Women Aged 18-64 by Federal Poverty Level, 2004-2005



Gap: No coverage for at least 1 month in last year

Uninsured: No coverage for over 1 year

Lack: Combined respondents of "Gap" and "Uninsured"

Source: California Women's Health Survey, 2004-2005

- 1 Estimate based on data from the 2004-2005 CWHS.
- 2 The Kaiser Commission on Medicaid and the Uninsured, *Sicker and Poorer: The Consequences of Being Uninsured*, May 2002. Available at: <http://www.kff.org/uninsured/upload/Full-Report.pdf>.
- 3 Respondents with missing information were excluded from the analysis. Minimum cell size is 40.
- 4 Respondents could select more than one type of health care coverage.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

The California Women's Health Survey (CWHS) questioned women about their participation at any time during the preceding 12 months in California's public assistance welfare program, also known as California Work Opportunity and Responsibility to Kids (CalWORKs). Women were also asked about their race/ethnicity (self-identification), age and marital status. Data presented here are from a combination of 2004 and 2005 surveys.

Of the women in the CWHS, 4.4 percent (n=396 women) said they had received public assistance some time during the 12 months preceding the survey. The percent distribution among women who said they had received assistance varied by race/ethnicity. Hispanics

were the largest group (40.5 percent), followed by whites (26.9 percent), Black/African American (21.5 percent), and Asians/Others (11.1 percent).

The percentage of women who received welfare assistance also varied by age. The largest group was aged 25 to 34 years (34.3 percent), and the smallest group was among those aged 65 years and older.

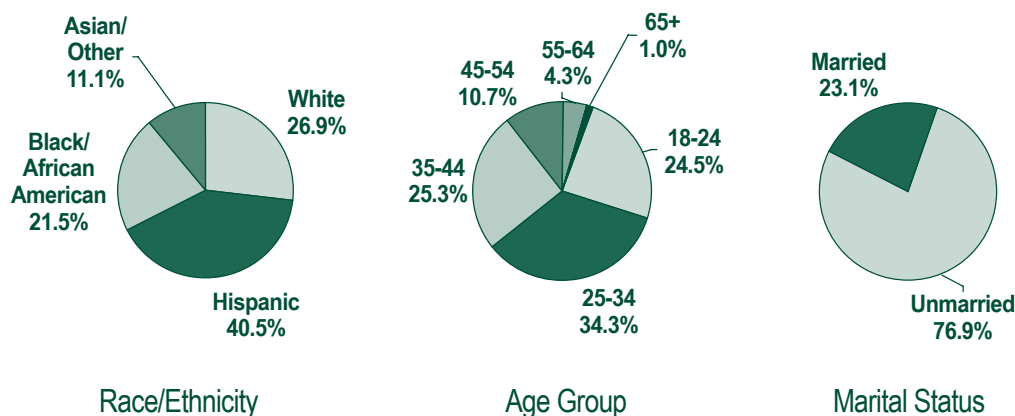
More than three times the number of unmarried women received public assistance than did married women (76.9 percent vs. 23.1 percent, respectively).

Women Receiving Public Assistance in the Preceding 12 Months and Their History of Foster Care

Department of Social Services
Research and Evaluation Branch

Public Health Message:
Women with a history of being in foster care were more likely than the general population to have received public assistance in the past 12 months. Therefore, outreach toward Foster Care providers and those currently in the Foster Care Program could help reduce dependency among former foster children.

Women Who Received Public Assistance By Selected Demographic Characteristics, California, 2004-2005



Source: California Women's Health Survey, 2004-2005

Women Receiving Public Assistance in the Preceding 12 Months and Their History of Foster Care

Department of Social Services
Research and Evaluation Branch

WOMEN WHO WERE IN THE FOSTER CARE PROGRAM PRIOR TO THEIR EIGHTEENTH BIRTHDAY

Caring for children has long been a priority for California agencies. The Foster Care Program (FCP) includes many diverse programs to address issues confronting California children. The FCP is currently administered by the counties, with oversight by the Department of Social Services.

Women in the 2004 and 2005 CWSHS surveys were asked if they had participated in the FCP prior to their 18th birthday, and 2.7 percent of California women (n=243) reported that they had.

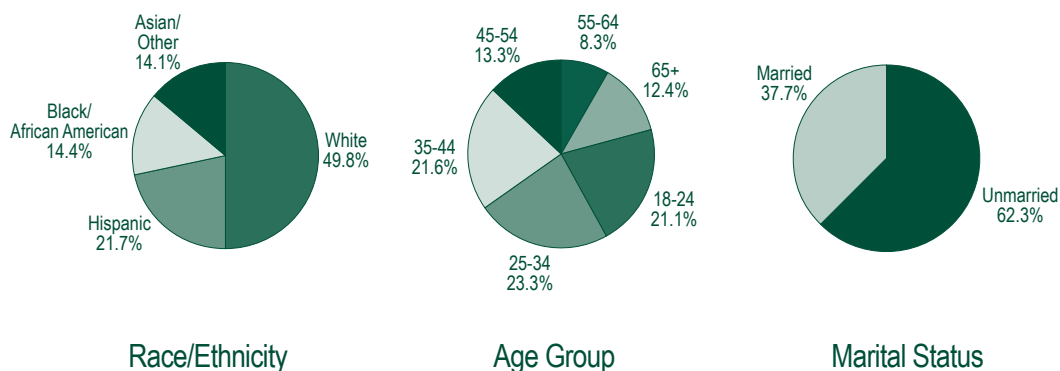
This group of women who had been in the FCP varied by race/ethnicity, age and marital status. White women comprised the largest group (49.8 percent), followed by Hispanics (21.7 percent), Black/African American (14.4

percent) and Asians/Others (14.1 percent). More younger women (aged 25 to 34 years) had participated before age 18 (23.3 percent), followed by women aged 35 to 44. (21.6 percent). More unmarried women had once participated in foster care (62.3 percent) than married women (37.7 percent).

PUBLIC ASSISTANCE AND FOSTER CARE

Of the 243 women who reported having been in Foster Care, 20.5 percent reported they had received public assistance in the previous 12 months. This rate was 4.7 times higher than that observed in the general population (4.4 percent). Conversely, of the 395 women who reported they had received public assistance, 12.6 percent reported having been in the Foster Care Program, which was 4.7 times the rate in the general population (2.7 percent).

Women Who Were in the Foster Care Program Before Age 18 by Selected Demographic Characteristics, California, 2004-2005



Source: California Women's Health Survey, 2004-2005

Submitted by: Bill Kirk, M.A., M.P.H., Assistant Chief, and Sheila Dumbauld, Research and Evaluation Bureau, Administration Division, Department of Social Services; Webb Hester, (916) 653-5770, Webb.Hester@dss.ca.gov



Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

California has several food assistance programs designed to help alleviate the problem of food scarcity for women and their families. The cornerstone of this food safety network is the Food Stamp Program (FSP) administered in California by the Department of Social Services.

The California Women's Health Survey (CWHS) asked women if they had received assistance from the FSP at any time during the 12 months preceding the survey. The women were also asked about their race/ethnicity (self-identification), age, marital status, and family income. The data used in this analysis combined responses from the 2004 and 2005 surveys.

This analysis examined the participation in the FSP by women who were at or below 130 percent of the federal poverty level the (FPL), which is the gross income criterion for participating in the FSP (and only one of several criteria used to qualify). The 2004 and 2005 surveys included 1,923 women (23.0 percent of the total surveyed) with this income level. Among them, 425 women (22.1 percent)

reported they had received food stamps at some time during the preceding 12 months.

RACE/ETHNIC GROUPS

The rate of income-eligible women who reported they received food stamps varied significantly among race/ethnic groups (chi-square test, 91.4, $P < .0001$). Black/African American women had significantly higher rates (52.0 percent) than other race/ethnic groups (which did not vary from one another significantly): Whites (20.9 percent); Hispanics (19.6 percent); and Asians/Others (19.1 percent).

AGE GROUPS

Women in certain age groups also participated in the FSP at significantly different rates (chi square test, 120.5, $P < .0001$). Women in the 25-34 and 35-44 age groups were most likely to report participating in the FSP, (33.5 percent and 30.2 percent, respectively). Women least likely to have reported participating in the FSP were those aged 65 years and older (1.0 percent).

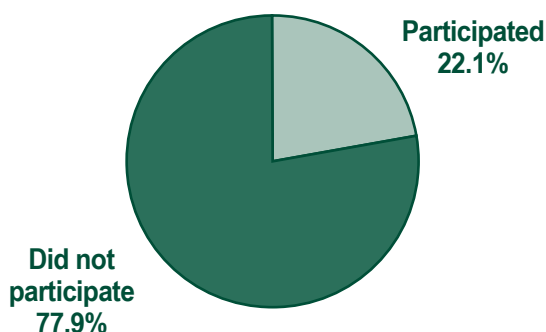
Participation in the Food Stamp Program by Women Who Are at or Below 130% of Poverty

Department of Social Services
Research and Evaluation Branch

Public Health Message:

Almost one-third of women who were income-eligible for the Food Stamp Program in the 2004 and 2005 CWHS indicated that they did not know about the program or how to apply for benefits. Programs that supply food to families in California should be aware of the potential reasons why women do not apply for food stamps in order to focus outreach efforts. Survey responses indicate that promotional efforts might realize the greatest gains if they were targeted towards Hispanic women, unmarried women, and women aged 22 to 29.

Participation in Food Stamp Program by Women With Household Incomes At or Below 130% of the Federal Poverty Level, California, 2004-2005



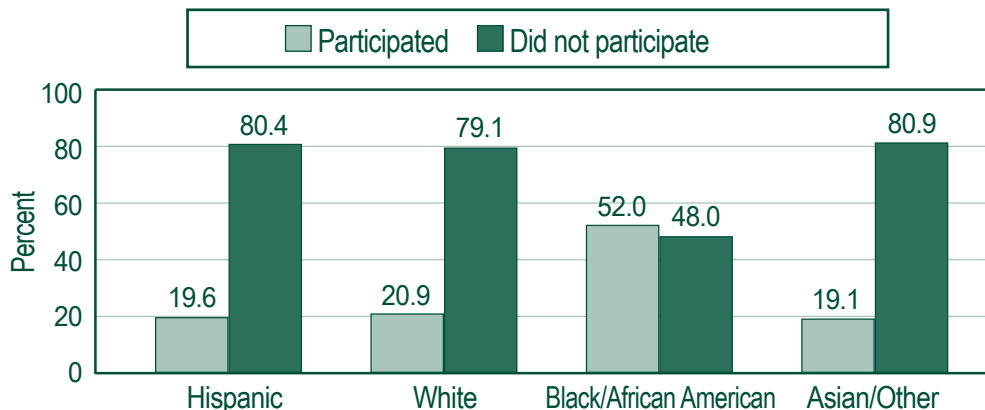
Source: California Women's Health Survey, 2004-2005

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Participation in the Food Stamp Program by Women Who Are at or Below 130% of Poverty

Department of Social Services
Research and Evaluation Branch

Participation in Food Stamp Program by Women With Household Incomes At or Below 130% of Poverty by Race/Ethnicity, California, 2004-2005



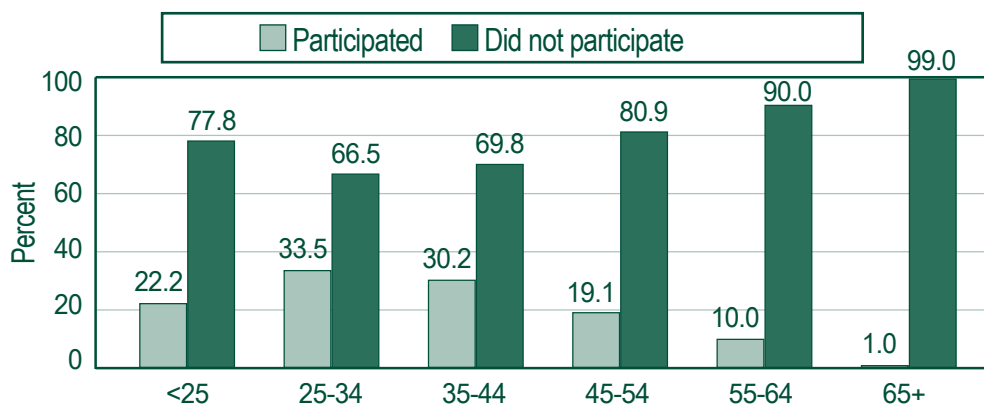
Source: California Women's Health Survey, 2004-2005

Low-income seniors who qualify for food stamps have historically had very low participation rates nationally. The U.S. Department of Agriculture (USDA) recently established a demonstration program in six states to determine if additional assistance would improve participation by seniors.¹ The demonstrations were organized around one of three strategies: (1) Simplifying eligibility requirements for women aged 65 and older; (2) Directly assisting seniors with the application process; or (3) Offering food each month instead of the benefits transfer card.

Results showed that the FSP participation by people 65 and older increased substantially

after most of the demonstrations started. As is the case nationally,² California's participation by seniors in the FSP is very low. One reason for the low use rate by women age 65 and older may be related to possible lack of eligibility for food stamps due to older respondents' receipt of financial assistance such as the federally funded Supplemental Security Income/State Supplementary Payment Program (SSI/SSP). According to a report from the California Food Policy Advocates, the federal Food Stamp Program does not meet the needs of many seniors in California because of special state and federal rules that make SSI/SSP recipients ineligible for food stamps.³

Participation in Food Stamp Program by Women With Household Incomes At or Below 130% of Poverty by Age Group, California, 2004-2005

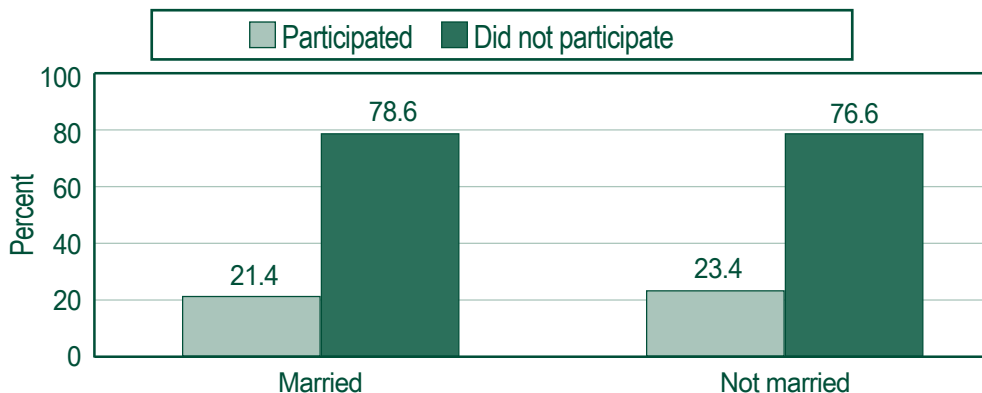


Source: California Women's Health Survey, 2004-2005

Participation in the Food Stamp Program by Women Who Are at or Below 130% of Poverty

Department of Social Services
Research and Evaluation Branch

Participation in Food Stamp Program by Women With Household Incomes At or Below 130% of Poverty by Marital Status, California, 2004-2005



Source: California Women's Health Survey, 2004-2005

MARITAL STATUS

Among income-eligible women, no significant difference in participation rates was found between married and single women (21.4 percent vs. 23.4 percent, respectively).

REASONS FOR NON-PARTICIPATION

Women who were potentially eligible for the FSP because they were at or below 130 percent of the FPL, but responded they had not participated in the FSP were asked why they did not participate (n=1,503 women). Answers were free form and were coded only after each respondent gave her reason for non-participation.

While food stamp caseloads declined from 1995 to 2000, more recent data (2000 forward) shows that participation in the FSP increased. The Economic Research Service of the USDA examined reasons why income-eligible women did not participate and found that while most of these non-participants were aware of the FSP and how to apply, about one-half said they did not realize they were eligible for the program.⁴ More than one-quarter (27 percent) responded that they would never apply even if they knew they were eligible, with the main reason given being a desire for personal independence.

Juarez and Associates⁵ conducted 10 focus groups within California to explore factors that affect participation in the FSP. Focus groups members indicated they would apply for food stamps if they were in a crisis situation, but would

first seek assistance from other resources. Lack of knowledge about the FSP appeared to be the most significant barrier preventing people from applying. Other reasons included the belief they did not qualify, that the FSP required too much personal information, or that participation might affect their legal status.

Women in the CWHS who were income-eligible for the FSP, but did not participate were asked their reasons: 41.3 percent responded that they did not need food stamps and 4.1 percent said that they did not want any government help. Sixteen percent of the women reported that they had applied, but did not qualify, and 1.9 percent had been denied food stamps.

Reasons Stated by Income-Eligible Women for Non-Participation in the Food Stamp Program

Reasons	Percent
Don't need them	41.3
Don't qualify	16.0
Didn't think I was eligible	14.9
Don't know how to get them	5.6
Don't want government help	4.1
Don't know about Food Stamps	3.8
Didn't think about them	3.3
Too hard to apply	3.1
Worried about citizenship	2.8
Denied Food Stamps	1.9
Too embarrassed to use them	0.5
In process	1.0
Other reasons	1.7

Source:
California Women's Health Survey, 2004-2005

Participation in the Food Stamp Program by Women Who Are at or Below 130% of Poverty

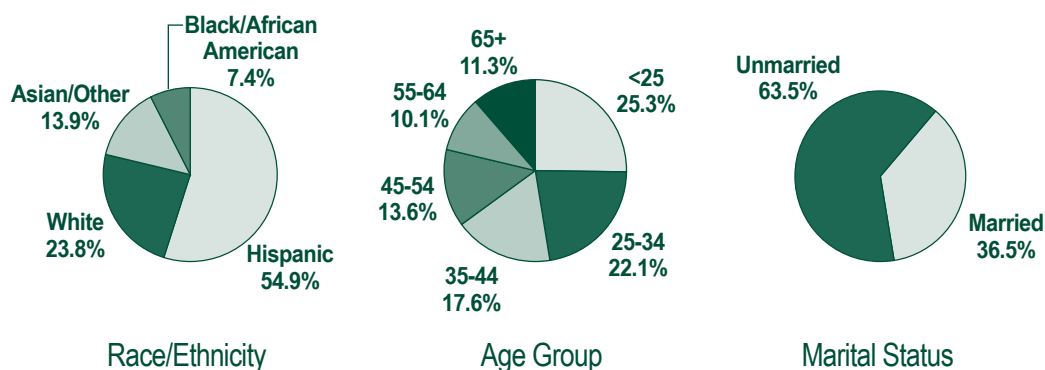
Department of Social Services
Research and Evaluation Branch

The CWHS found that 30.7 percent of the women either did not know about the FSP, did not know how to apply for the program, did not think about getting food stamps, or did not think they were eligible. This group of women varied by race/ethnicity: Hispanic women were more likely to report not knowing about or how to apply for the program, (54.9 percent), compared with 23.8 percent of Whites, 13.9 percent of Asians/Others, and 7.4 percent of Black/African Americans.

Women who did not know about the program or how to apply for it also varied by age. Those less than 25 years of age had the highest rates (25.3 percent), followed by women aged 25 to 34 years (22.1 percent).

Unmarried women were more likely than married women to report they did not know about the program or how to apply (63.5 percent vs. 36.5 percent).

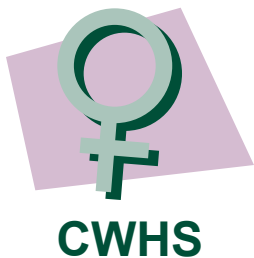
Women Who Were At or Below 130% of Poverty and Didn't Know About or How to Apply for Food Stamps by Race/Ethnicity, Age and Marital Status, California, 2004-2005



Source: California Women's Health Survey, 2004-2005

1. Cody, S. and Dagata E. Food Stamp Program—Elderly Nutrition Demonstrations. Interim Report on Elderly Participation Patterns. E-FAN-04-009, June 2004.
2. California Department of Social Services. (2002). Food Stamp Household Characteristics Survey, Federal Fiscal Year 2002, Sacramento, CA
3. California Food Advocates. "Preventing Hunger Among Elderly Californians. A Background Paper for Advocates and Service Providers". August 2003.
4. Bartlett, S and Burstein N, Abt Associates Inc. Food Stamp Program Access Eligible Nonparticipants, USDA, Economic Research Service, No. E-FAN-03013-2, May 2004.
5. Juarez and Associates and Chavez, R. Perceptions of the Food Stamp Program Among Limited-Household Income Residents of California: Results from Focus Groups, May 2002.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

The health benefits of eating fish are well-documented, and the American Heart Association recommends that everyone have at least two three-ounce servings each week.¹ However, frequent consumption of mercury-contaminated fish can impair neurodevelopment in young children and the developing fetus.² National advisories recommend that young children as well as women who are pregnant, might become pregnant, or are breastfeeding limit consumption to 12 ounces per week of most commercial fish (i.e., fish purchased from stores and restaurants) or six ounces per week of sport fish (i.e., fish caught by themselves, friends or family) because of mercury contamination.³ The California Environmental Protection Agency has also issued numerous advisories for sport fish, because elevated levels of mercury have been found in fish in many areas of the state due to historic mining activities.⁴ The National Health and Nutrition Examination Survey, a nationally representative study, obtained dietary records and measured mercury levels in blood, and estimated that 6 percent of U.S. women of childbearing age may be exposed to mercury at levels of health concern due to fish consumption.⁵

Because women are a primary target for fish consumption advisories based on mercury, the 2005 California Women's Health Survey (CWHS) included questions about consumption of commercial

fish, sport fish, and awareness of fish consumption advisories. Results are weighted to represent the entire population of California. Fish consumption rates are expressed as the average (geometric mean) amount eaten over the previous 30 days, measured in grams of cooked fish per day. For ease of interpretation, rates are also presented as the number of three-ounce servings eaten per week (although the data indicate that 43 percent of women eat more than three ounces of fish per meal).

FISH CONSUMPTION

Highlights of the study are as follows:

- The study indicated that 76 percent of California women do not eat as much fish as the American Heart Association recommends.
- Consistent with estimates obtained by the National Health and Nutrition Examination Survey, 7 percent of California women of childbearing age (under age 50) ate fish at levels exceeding national advisory limits for commercial fish. This proportion varied by ethnicity, with 6 percent of White women, 13 percent of Black/African Americans, 3 percent of Hispanics, and 16 percent of Asians/Others exceeding advisory limits for commercial fish.

Fish Consumption and Advisory Awareness among California Women

California Department of Public Health
Environmental Health Investigations Branch

Public Health Message:

Fish is a healthy food, and more than three-quarters of California women are not eating enough of it. At the same time, certain species of fish are contaminated with mercury and other chemicals. Seven percent of California women of childbearing age eat commercial fish at levels high enough to be a possible health concern. This proportion is highest among Black/African Americans and Asians/Others, indicating that disparities may exist in exposure to contaminants. Non-Whites as well as women with low incomes or low education levels are less likely to be aware of health advice regarding contaminants in fish. Greater efforts should be made to publicize information about the benefits of eating fish and the risks of contaminants in certain species, so that all California women can make informed decisions, regardless of age, ethnicity, education level, or income.

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Fish Consumption and Advisory Awareness among California Women

California Department of
Public Health
Environmental Health
Investigations Branch

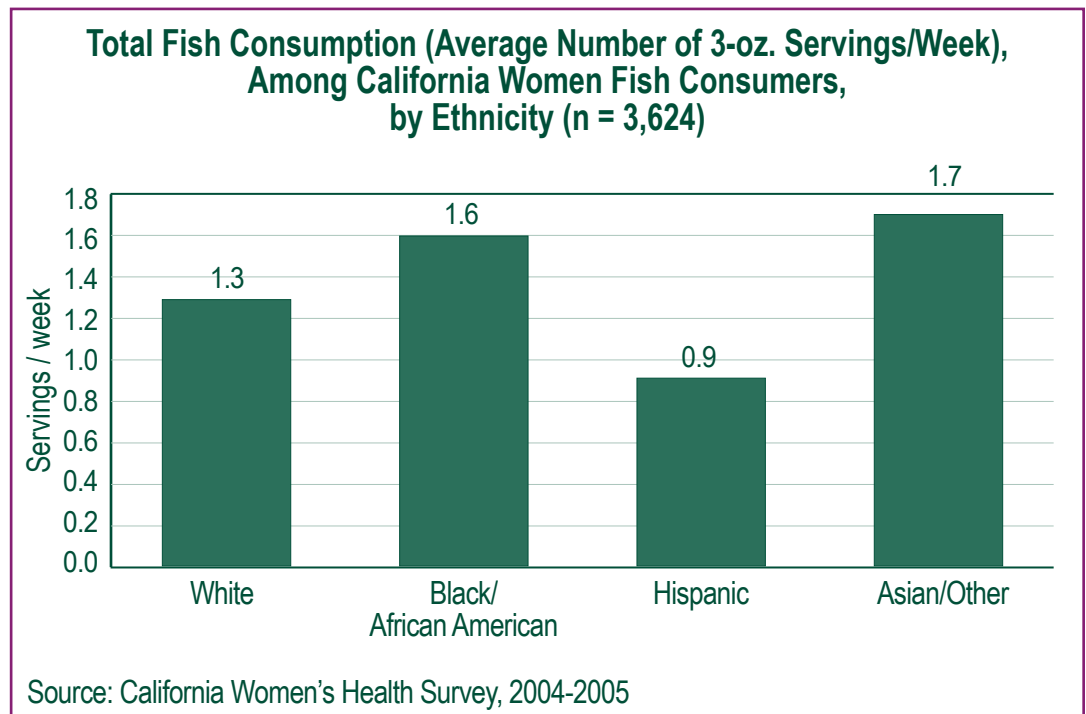
- Among California women of childbearing age, 1 percent exceeded national advisory limits for sport fish. This proportion was highest for Asians/Others (3 percent).
- During 2005, 84 percent of respondents ate commercial fish, and 17 percent ate sport fish; 67 percent of respondents' children ate commercial fish, and 13 percent ate sport fish.
- Among fish consumers, the average rate of fish consumption was 14.9 grams/day (1.2 three-ounce servings/week) for commercial fish, 8.1 g/day (0.7 servings/week) for sport fish, and 15.5 g/day (1.3 servings/week) for fish from all sources.
- Ethnicity was a strong predictor of total fish consumption (sport and commercial combined, $P < .0001$) as well as of commercial fish consumption alone ($P < .0001$). Hispanic women ate the least, Whites eat an intermediate amount, and Black/African Americans and Asians/Others ate the most (see Figure).
- Ethnicity is also a strong predictor of sport fish consumption ($P = .01$). White women ate the least sport fish (7.0 g/day, or 0.6 servings/week). Rates among Black/African Americans (11.1 g/day, or 0.9 servings/week), Hispanics (9.0 g/day, or 0.7 servings/week), and Asians/Others (9.5 g/day, or 0.8 servings/week) were significantly higher.
- Rates of total and commercial fish consumption increased significantly with increasing age, education level and income.

ADVISORY AWARENESS

- Less than half of women (48 percent) were aware of fish health advisories.
- Ethnicity was a significant predictor of advisory awareness: 61 percent of white women knew of advisories, compared to 40 percent of Black/African Americans, 23 percent of Hispanics, and 50 percent of Asians/Others.
- Advisory awareness increased significantly with increasing age, education level and income.

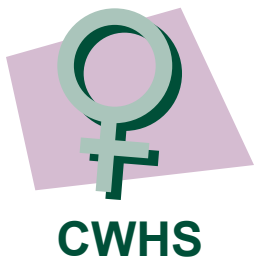
Fish Consumption and Advisory Awareness among California Women

California Department of
Public Health
Environmental Health
Investigations Branch



- 1 American Heart Association. *Our 2006 Diet and Lifestyle Recommendations*. Available at: <http://www.americanheart.org/presenter.jhtml?identifier=851>. Accessed February 8, 2007.
- 2 Committee on the Toxicological Effects of Methylmercury, Board on Environmental Studies and Toxicology, National Research Council. *Toxicological Effects of Methylmercury*. Washington, DC: National Academy of Sciences; 2000.
- 3 US Food and Drug Administration, US Environmental Protection Agency. *What You Need to Know About Mercury in Fish and Shellfish*. Washington, DC: FDA/Center for Food Safety & Applied Nutrition; March 2004. Available at: <http://www.cfsan.fda.gov/~dms/admeHg3.html>. Accessed January 2, 2007.
- 4 California Environmental Protection Agency, Office of Environmental Health Hazard Assessment. *FISH - Site-Specific Advisory Information*. Sacramento, CA. Available at: http://www.oehha.ca.gov/fish/so_cal/index.html. Accessed January 2, 2007.
- 5 Centers for Disease Control and Prevention (CDC). Blood mercury levels in young children and childbearing-aged women--United States, 1999-2002. *MMWR Morb Mortal Wkly Rep* 2004; 53(43):1018-1020.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

National population-based studies suggest a strong correlation between alcohol consumption (particularly heavy drinking) and tobacco use.^{1,2} In a 2005 United States study, 60.6 percent of heavy drinkers aged 12 or older (defined as drinking at least five drinks on the same occasion, on at least five days in the previous 30 days) smoked cigarettes in the previous month. In contrast, only 20.4 percent of non-binge drinkers (binge use was defined as drinking at least five drinks on the same occasion at least once in the previous 30 days) and 16.7 percent of people who did not drink alcohol in the previous month were current smokers.³

Tobacco use and heavy alcohol use are associated with a number of health problems. Heavy drinkers are at increased risk of alcohol-related liver disease, injury, neurological problems, hypertension, stroke, and gynecological problems.⁴ Smokers are at increased risk of cancer, cardiovascular disease, and chronic and obstructive lung disease.^{5,6,7} The concurrent use of alcohol and tobacco enhances the risk of certain cancers, particularly those of the oral cavity.¹

Pregnant women are advised to abstain from using alcohol and tobacco.⁸ Alcohol use during pregnancy is associated with fetal alcohol syndrome (FAS) and fetal alcohol spectrum disorders (FASD) and is one of the top preventable causes of birth defects and disabilities.⁹ No safe level of alcohol consumption during pregnancy is known. Women who smoke during pregnancy are more likely than non-smokers to miscarry or deliver a low birth-weight baby, and they are more than twice as likely to lose a child to sudden infant death syndrome (SIDS).¹⁰

The 2004 and 2005 California Women's Health Surveys (CWHS) asked about:

- Previous 30-day alcohol consumption (included whether or not respondents drank at all, how much they drank on average, and whether or not they had ever consumed five or more drinks at one time)
- If there was "ever a time when you felt your drinking had a harmful effect on your health"
- If respondents had "ever gone to anyone – a physician, AA, a treatment agency, anyone at all – for a problem related in any way to your drinking"

Based on their answers, respondents were classified as **abstainers** (consumed no alcohol in the previous 30 days), **moderate drinkers** (consumed alcohol in the previous 30 days, but did not consume five or more drinks on at least one occasion), and **binge drinkers** (consumed five or more drinks on one or more occasions in the previous 30 days). A **past alcohol problem** was defined as reporting harm to health from drinking and seeking help for a drinking problem.

Women were also asked about tobacco use. Smoking status was classified as having smoked in the previous 30 days, being a former smoker, or never having smoked.

This report is based on 2004 and 2005 data (N = 9180) and examines the relationship between alcohol and tobacco use among women in two general areas:

- The association between smoking and current drinking or past alcohol problems

Alcohol and Tobacco Use Among Pregnant and Nonpregnant Women

California Department of Alcohol and Drug Programs

Public Health Message:

These findings underscore the importance of screening for alcohol and tobacco use among women in health care settings, including ones that serve women who are pregnant or who are trying to become pregnant. Screening and brief interventions in primary care settings related to both tobacco and alcohol use among women, including pregnant women, appear to be effective and are recommended.^{15,16}

The strong correlation between binge drinking and smoking affirms the importance of ensuring that programs for treating alcohol-related problems can also address smoking, especially in programs serving pregnant and parenting women. Smoking cessation programs, particularly stage-based strategies that begin by preparing smokers to become ready to quit followed by other interventions, are promising and may enhance long-term sobriety.¹⁷

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Alcohol and Tobacco Use Among Pregnant and Nonpregnant Women

California Department of
Alcohol and Drug Programs

- Alcohol and tobacco use among women aged 18 to 44 years according to pregnancy status (pregnant [N=225], trying to become pregnant [N=234], not pregnant or trying to become pregnant [N=3,981])

Highlights of the study are as follows:

Alcohol and Tobacco Use

- A strong relationship was found between binge drinking and tobacco use.
 - Rates of *current* smoking were significantly higher among binge drinkers (31.0 percent) than moderate drinkers (12.2 percent) or abstainers (9.9 percent).
 - Rates of *past* smoking were slightly higher among both binge drinkers (22.9 percent) and moderate drinkers (26.6 percent) compared to women who did not drink in the previous month (17.7 percent).
 - The proportion of women who had never smoked was highest among women who had not consumed alcohol in the previous month.
- An earlier examination of the 2004 CWSHS data found that binge drinkers were more likely than moderate drinkers or abstainers to report past harm to their health because of drinking (34 percent vs. 17 percent and 13 percent, respectively) and to report seeking help for a drinking problem (7 percent vs. 3 percent and 2 percent).¹¹
- The combined 2004 and 2005 CWSHS data showed that smoking rates were higher among women with indicators of alcohol-related problems.
 - Women who felt their drinking had a harmful effect on their health were more likely to be *current* smokers than women who reported no harmful effects from drinking (23.3 percent vs. 10.4 percent).

- Women who felt their drinking was harmful to their health were also more likely to be *former* smokers (32.3 percent vs. 20.0 percent).
- Women who had sought help for an alcohol-related problem were more likely to be *current* smokers than women who never sought help for an alcohol-related problem (38.5 percent vs. 11.7 percent).
- Women who had sought help for an alcohol-related problem were also more likely to be *former* smokers than women who never sought help for an alcohol-related problem (32.8 percent vs. 21.7 percent).

Alcohol and Tobacco Use During Pregnancy

Because of the risks associated with alcohol consumption during pregnancy, the national Healthy People 2010 goal is to increase abstinence during pregnancy from any alcohol use to 94 percent and from heavy drinking to 100 percent.¹²

The combined 2004 and 2005 CWSHS data showed:

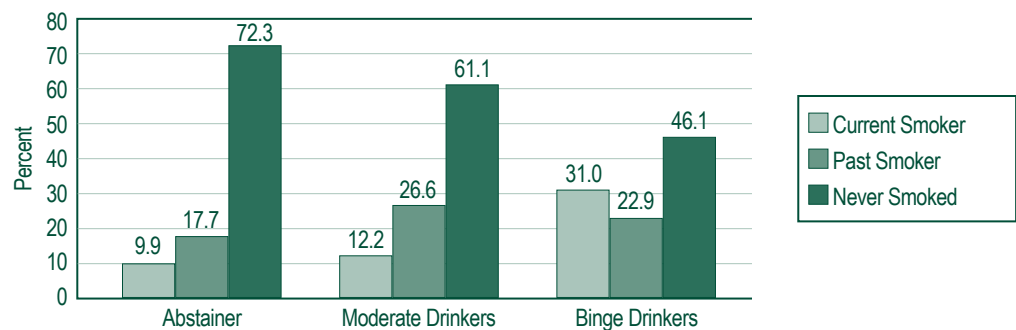
- Most pregnant women (93.7 percent) abstained from alcohol consumption; of the remaining 6.3 percent of women, most consumed some alcohol, and some reported binge drinking in the previous 30 days. This is generally consistent with earlier data from the California Women's Health Survey¹³ and similar national studies.¹⁴
- Women who were trying to get pregnant had a similar rate of *moderate drinking* as women who were not trying to become pregnant (45.4 percent vs. 42.1 percent, respectively).
- Women trying to get pregnant had lower rates of *binge drinking* than women who were not trying to become pregnant (6.8 percent vs. 12.5 percent, respectively).

Alcohol and Tobacco Use Among Pregnant and Nonpregnant Women

California Department of Alcohol and Drug Programs

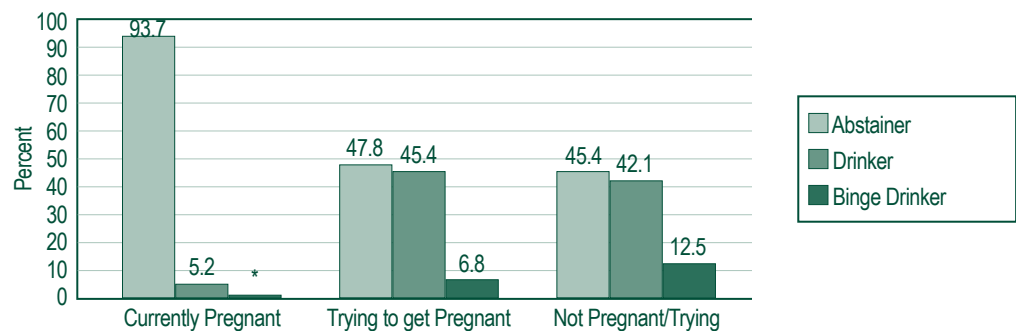
- Most respondents who were pregnant reported abstaining from both alcohol and tobacco use (90.4 percent), leaving 9.6 percent of pregnant women reporting use of alcohol, tobacco or both in the previous 30 days.
- No significant differences were found for alcohol and/or tobacco use in the previous month between women who were trying to become pregnant and those who were not (56.5 percent and 59.2 percent, respectively).

Women's Current and Past Smoking Habits by Drinking Status



Source: California Women's Health Survey, 2004-2005

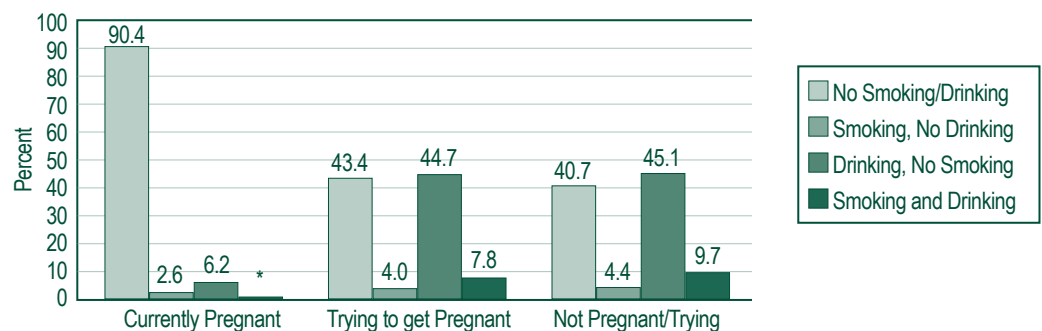
Alcohol Consumption by Pregnancy Status



* Estimate is not significantly different from 0.

Source: California Women's Health Survey, 2004-2005

Alcohol and Tobacco Consumption in the Previous Month, by Pregnancy Status



* Estimate is not significantly different from 0.

Source: California Women's Health Survey, 2004-2005

Alcohol and Tobacco Use Among Pregnant and Nonpregnant Women

California Department of Alcohol and Drug Programs

- 1 Anthony JC, Echeagaray-Wagner F. Epidemiologic analysis of alcohol and tobacco use. *Alcohol Res Health* 2000; 24(4):201-208.
- 2 Grucza RA, Bierut LJ. Cigarette smoking and the risk for alcohol use disorders among adolescent drinkers. *Alcohol Clin Exp Res* 2006;30(12):2046-2054.
- 3 Substance Abuse and Mental Health Services Administration. *Results From the 2005 National Survey on Drug Use and Health: National Findings*. Rockville, MD: Office of Applied Studies; 2006. NSDUH Series H-30, DHHS Publication No. (SMA) 06-4194.
- 4 Bradley KA, Badrinath S, Bush K, Boyd-Wickizer J, Anawalt B. Medical risks for women who drink alcohol. *J Gen Intern Med* 1998;13(9):627-39.
- 5 US Department of Health and Human Services. *The Health Consequences of Smoking: Cancer - A Report of the Surgeon General*. Washington, DC: US Office of the Assistant Secretary of Health, Office of Smoking and Health; 1982. DHHS Publication 82-50179.
- 6 US Department of Health and Human Services. *The Health Consequences of Smoking: Cardiovascular Disease - A Report of the Surgeon General*. Washington, DC: US Office of the Assistant Secretary of Health, Office of Smoking and Health; 1983. DHHS Publication 84-50204.
- 7 US Department of Health and Human Services. *The Health Consequences of Smoking: Chronic and Obstructive Lung Disease - A Report of the Surgeon General*. Washington, DC: US Office of the Assistant Secretary of Health, Office of Smoking and Health; 1984. DHHS Publication 84-50205.
- 8 Kaiser LL, Allen L; American Dietetic Association. Position of the American Dietetic Association: Nutrition and lifestyle for a healthy pregnancy outcome. *J Am Diet Assoc* 2002;102(10):1479-1490.
- 9 Centers for Disease Control and Prevention (CDC). *Alcohol Use During Pregnancy*. CDC, US Department of Health and Human Services; 2005.
- 10 Centers for Disease Control and Prevention (CDC). *Health & Economic Impact: Smoking Cessation for Pregnant Women*. US Department of Health and Human Services; 2002.
- 11 Drabble L. *Health and Mental Health Problems Among California Women by Drinking Status: Abstainers, Moderate Drinkers and Heavier Drinkers*. Sacramento, CA: California Department of Health Services, Office of Women's Health; 2006. Data Point 4(13).
- 12 US Department of Health and Human Services. *Healthy People 2010*. Vol 1-2. 9th ed. Washington, DC: US Government Printing Office; 2000.
- 13 Drabble L. *Alcohol Consumption Among Adult Women: Findings From the California Women's Health Survey, 1997 – 2002*. In: *Women's Health: Findings from the California Women's Health Survey, 1997-2003*. Sacramento, CA: California Department of Health Services; 2006:3-1–3-6.
- 14 Centers for Disease Control and Prevention (CDC). Alcohol consumption among women who are pregnant or who might become pregnant – United States, 2002. *MMWR Morb Mortal Wkly Rep* 2004;53(50):1178-1181.
- 15 US Preventive Services Task Force. *Counseling to Prevent Tobacco Use and Tobacco-Related Diseases: Recommendation Statement*. Rockville, MD: Agency for Healthcare Research and Quality; 2003.
- 16 US Preventive Services Task Force. *Screening and Behavioral Counseling Interventions in Primary Care to Reduce Alcohol Misuse: Recommendation Statement*. Rockville, MD: Agency for Healthcare Research and Quality; 2004.
- 17 Prochaska JJ, Delucchi K, Hall SM. A meta-analysis of smoking cessation interventions with individuals in substance abuse treatment or recovery. *J Consult Clin Psychol* 2004;72(6):1144-1156.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

Cervical cancer is treatable if detected early.^{1,2} Papanicolaou (Pap) tests performed at regular intervals can help detect pre-cancerous cells before invasive cancer develops.^{1,2} The American Cancer Society recommends that women begin annual screening after the onset of sexual activity, but no later than 21 years of age.³ The screening interval may be lengthened to two to three years for women aged 30 and over who have had a series of three normal Pap test results.³ The United States Preventive Services Task Force recommends screening for cervical cancer at least every three years for women aged 21 years and older.⁴

Women who have never been screened for cervical cancer or have not been screened within the previous five years (defined as "never or rarely screened") are at higher risk for developing invasive cervical cancer.¹ These women are more likely to be older, members of an ethnic minority, uninsured, and poor.¹ As part of the *National Breast and Cervical Cancer Detection Program*, the California program, *Cancer Detection Programs: Every Woman Counts*, provides free cervical cancer screening to low-income and medically underserved women aged 25 years and older in California.⁵ Consistent with the national program policy, the California program targets women who are never or rarely screened and aims for those individuals to comprise at least 20 percent of the screened population in California.⁶

In 2005, The California Women's Health Survey (CWHS) asked women if they ever had a Pap test and if so, how long it had been since their last test (within the past year, more than one year to two years ago, more than two years to three years ago, more than three years to five years ago, or more than five years ago). The survey data were weighted to the age and

race/ethnicity distribution of the 2000 California population. Women who reported having had a hysterectomy ($n = 49$) or refused to respond to the question ($n = 260$) were not included in the analysis. Out of 2,764 women aged 25 to 64 years who were included in the analysis, 163 had never or rarely been screened. Findings for American Indian/Native American women are not provided due to the small number surveyed.

The highlights of the analysis are as follows:

- Overall, 89.4 percent of the women had a Pap test within three years, 4.0 percent had a Pap test within the last four to five years and 6.6 percent had never had a Pap test or had rarely been screened.
- Racial/ethnic disparities were found: 10.8 percent of Black/African American women, 8.8 percent of Asian/Pacific Islander women, and 7.7 percent of Hispanic women were never or rarely screened vs. 5.1 percent of White women (chi-square test, $P < .0001$).
- Differences between women of different socioeconomic status were also found: 10.6 percent of women living at or below 200 percent of the federal poverty level (FPL) had never or rarely been screened vs. 4.6 percent of women living above that level (chi-square test, $P < .0001$).
- Rates among women who had never or rarely been screened were higher for those living at or below 200 percent of the FPL than those living above that level for the three race/ethnic groups analyzed (Asian/Pacific Islanders, Hispanics and Whites) (chi-square test, $P < .0001$).

Women Who Are Never or Rarely Screened for Cervical Cancer, California, 2005

California Department of Public Health
Cancer Detection Section

Public Health Message:

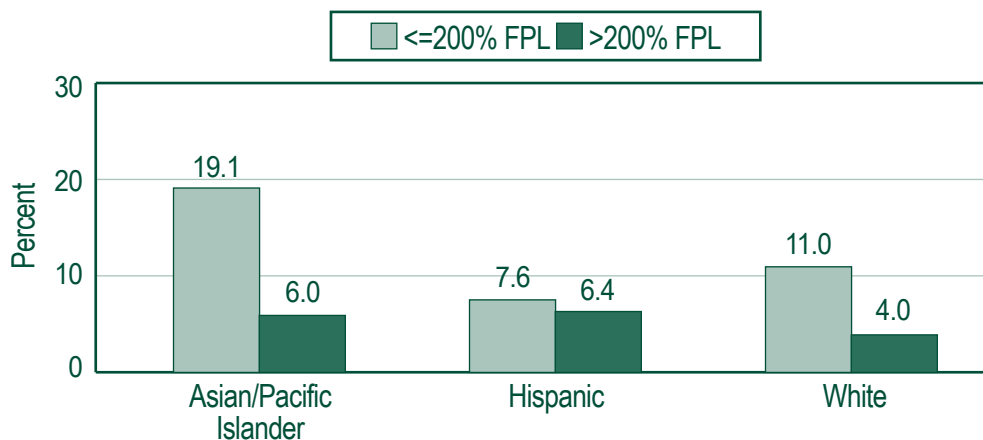
Although most women in California receive cervical cancer screening within the recommended guidelines of every three years, about 7 percent have never or rarely been screened. Poorer women and women in minority groups have significantly lower rates of regular screening than wealthier and White women and should be targeted by cervical cancer screening programs.

Issue 5, Summer 2008, Num. 7

Women Who Are Never or Rarely Screened for Cervical Cancer, California, 2005

California Department of
Public Health
Cancer Detection Section

Percentages of Never or Rarely Screened Women for Cervical Cancer by Race/Ethnicity and Federal Poverty Level (FPL), California, 2005

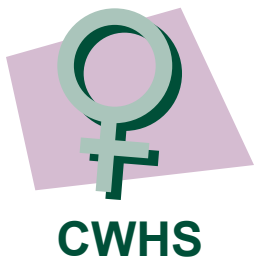


Note: Findings for Black/African American women and American Indian/Native American women were unreliable due to small sample size and are not shown.

Source: California Women's Health Survey, 2005

- 1 Cervical cancer. *NIH Consensus Statement* 1996; 14:1-38.
- 2 American Cancer Society. *Detailed Guide: Cervical Cancer*. Available at: http://www.cancer.org/docroot/CRI/CRI_2_3x.asp?dt=8
- 3 Smith RA, Cokkinides V, Eyre HJ. American Cancer Society guidelines for the early detection of cancer, 2006. *CA Cancer J Clin* 2006; 56:11-25.
- 4 U.S. Preventive Services Task Force. Screening for Cervical Cancer. January 2003. Available at: <http://www.ahrq.gov/clinic/uspstf/uspscerv.htm>
- 5 Cancer Detection Section, California Department of Health Services. *Cervical Cancer Screening and Treatment Information*. Available at: <http://www.dhs.ca.gov/ps/cdic/ccb/cds/cervicalcancer/cervicalcancer.htm>
- 6 National Breast and Cervical Cancer Early Detection Program. Available at: <http://www.cdc.gov/cancer/nbccedp>

Submitted by: Shannon Conroy, M.P.H., Nana Tufuoh, M.D., M.P.H., Weihong Zhang, M.S., Farzaneh Tabnak, M.S., Ph.D., California Department of Public Health, Cancer Detection Section, (916) 449-5338, Farzaneh.Tabnak@cdph.ca.gov



Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

Breast cancer is the most common cancer among women in California.¹ The five-year survival rate of breast cancer is only 20 percent when it is detected at a late stage, but is 97 percent when detected early.¹ Risk of the disease increases with age, especially after age 50.² About 80 percent of new cases and 82 percent of breast cancer deaths occur in women over age 50.²

The United States Preventive Services Task Force and several other organizations support screening mammography beginning at age 40³⁻⁷. *Cancer Detection Programs: Every Woman Counts*, part of the *National Breast and Cervical Cancer Detection Program*, provides free breast cancer screening to low-income and medically underserved women aged 40 years and older in California.⁸ National program policy requires that 75 percent of mammograms paid with its funds be provided to women aged 50 or older.⁹

This report focuses on barriers to having screening mammography. In 2004 and 2005, the California Women's Health Survey (CWHS) asked women if they had ever had a mammogram, how long it had been since their last mammogram, and the main reason for not having a mammogram within the previous year. The survey data were weighted to the age and race/ethnicity distribution of the 2000 California population. Findings are based on 2,058 women aged 50 to 64. Women who reported having mammograms because they already had

breast cancer (n = 65) and those who refused to respond to the question (n = 155) were not included. Findings for American Indian/Native American women are not provided due to the small number surveyed.

- In the 2004 and 2005 surveys, 55.2 percent of Asian/Pacific Islander women, 64.8 percent of Hispanic women, 67.5 percent of White women, and 72.7 percent of Black/African American women had a mammogram within the previous year.
- On the other hand, 35.0 percent of respondents reported not having a mammogram in the previous year. The most common reasons cited were inconvenience or not having time to go for a mammogram (31.7 percent); cost or not having medical insurance (18.3 percent); the procedure being too painful, being afraid, or not being interested in having one (17.5 percent); feeling there was no reason to have one (16.9 percent); and not having the test recommended by a doctor or nurse (15.6 percent).
- A higher percentage of women aged 50 to 64 who had not had a mammogram within the past year lived at or below 200 percent of the federal poverty level (FPL) than those above that level for all the race/ethnic groups.

Barriers to Annual Breast Cancer Screening for California Women Aged 50 to 64 Years, 2004 and 2005

California Department of Public Health
Cancer Detection Section

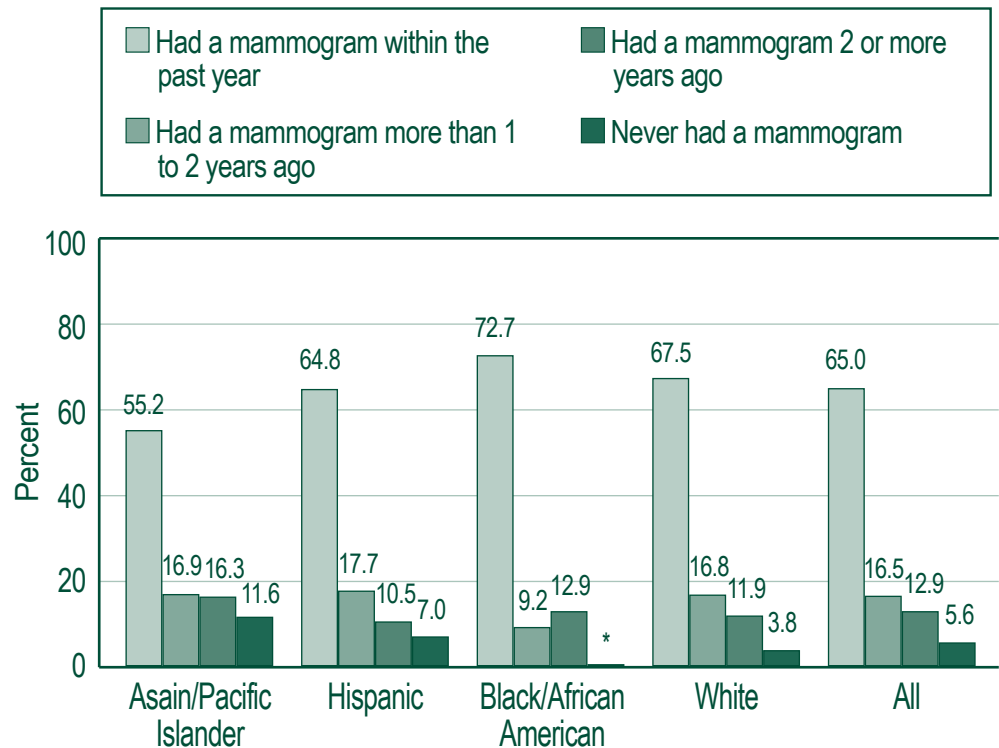
Public Health Message:

Annual breast cancer screening increases the likelihood of detecting breast cancer at an early stage and is recommended for women aged 40 years and older. Based on this report, an estimated 35.0 percent of California women aged 50 to 64 years do not have annual mammograms. Financial barriers should be addressed, and further outreach and education are recommended.

Barriers to Annual Breast Cancer Screening for California Women Aged 50 to 64 Years, 2004 and 2005

California Department of
Public Health
Cancer Detection Section

Screening Mammograms Among Women Aged 50 to 64 Years, by Race/Ethnicity, California, 2004 and 2005



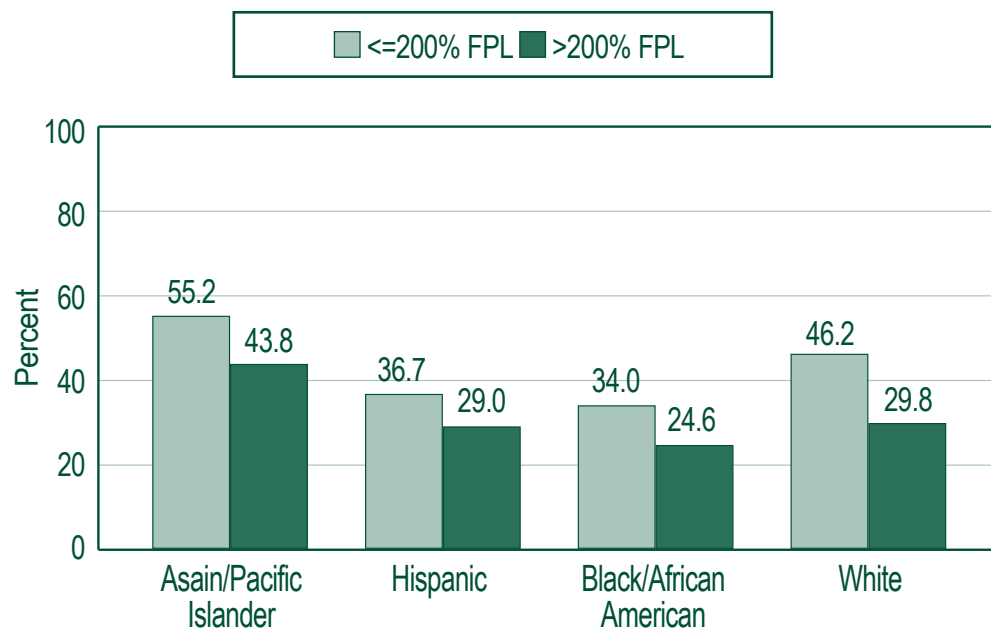
* The rate for Black/African American women who have never had a mammogram was not reliable due to small sample size.

Source: California Women's Health Survey, 2004-2005

**Barriers to Annual
Breast Cancer
Screening for
California Women
Aged 50 to 64 Years,
2004 and 2005**

California Department of
Public Health
Cancer Detection Section

**Women Aged 50 to 60 Years Reporting Not Having Had a
Mammogram Within the Past Year by Race/Ethnicity
and Federal Poverty Level (FPL) Status,
California, 2004 and 2005**



Source: California Women's Health Survey, 2004-2005

**Barriers to Annual
Breast Cancer
Screening for
California Women
Aged 50 to 64 Years,
2004 and 2005**

California Department of
Public Health
Cancer Detection Section

- 1 American Cancer Society, California Division and Public Health Institute, California Cancer Registry. *California Cancer Facts and Figures 2007*. Oakland, CA: American Cancer Society, California Division, September 2006.
- 2 Zabicki K, Colbert JA, Dominguez FJ, et al. Breast cancer diagnosis in women < or = 40 versus 50 to 60 years: Increasing size and stage disparity compared with older women over time. *Ann Surg Oncol* 2006; 13(8):1072-1077.
- 3 U.S. Preventive Services Task Force. *Screening for Breast Cancer: Recommendations and Rationale*. February 2002. Agency for Healthcare Research and Quality, Rockville, MD. Available at: <http://www.ahrq.gov/clinic/3rduspstf/breastcancer/brcanrr.htm>. Accessed January 10, 2007.
- 4 American Medical Association. Report 16 of the Council on Scientific Affairs (A-99). *Mammographic Screening for Asymptomatic Women*. 1999 – 2000 reports. Available at: <http://www.ama-assn.org/ama/pub/category/13541.html>. Accessed April, 2007.
- 5 American College of Obstetricians and Gynecologists. Primary and preventive care: Periodic assessments. ACOG Committee Opinion 246. Washington, DC: ACOG, 2000.
- 6 Feig SA, D'Orsi CJ, Hendrick RE, et al. American College of Radiology guidelines for breast cancer screening. *AJR Am J Roentgenol* 1998; 171(1):29-33.
- 7 Leitch AM, Dodd GD, Costanza M, et al. American Cancer Society guidelines for the early detection of breast cancer: Update 1997. *CA Cancer J Clin* 1997; 47(3):150-153.
- 8 California Department of Health Services, Cancer Detection Programs: Every Woman Counts. *Breast Cancer Treatment and Screening Information*. www.dhs.ca.gov/cancerdetection/breastcancer/breastcancer.htm.
- 9 Ryerson AB, Benard VB, Major AC. *National Breast and Cervical Cancer Early Detection Program 1991 – 2002 National Report*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Available at: http://www.cdc.gov/cancer/nbccedp/bccpdfs/national_report.pdf.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

Consistent and accurate use of effective contraception is important for preventing unintended pregnancy. Birth control use facilitates the spacing of pregnancies, which contributes to better health outcomes for mothers and children. In the United States (U.S.), the average age that a woman first has sexual intercourse is 17; for women who want only two children- the number most women report as desiring- more than two decades may be spent being sexually active while trying to avoid unintended pregnancy.¹

In 2004 and 2005, The California Women's Health Survey (CWHS) asked women aged 18 and above: "How many children have you ever given birth to, counting only live births?"

Of the more than 4,000 respondents aged 18 to 44 from the combined 2004-2005 survey, 22.1 percent reported having delivered three or more live births. Highlights of this subgroup are as follows:

- The proportion of women who reported delivering three or more live births increases linearly with age. The largest increase was between women in the 18-24 age group (3.3 percent) and women aged 25 to 29 (14.5 percent). One-quarter of women aged 30 to 34, and more than a third of older women aged 35 to 44 reported having three or more live births.
- Hispanics were more likely (33.3 percent) than Black/African Americans (26.0 percent), Whites (15.9 percent), and Asian/Pacific Islanders (9.7 percent) to report having three or more live births.²

- Women who did not complete high school were nearly 4.5 times more likely to report having delivered three or more live births (50.1 percent) than women with college or postgraduate degrees (11.5 percent).³
- A higher proportion of foreign-born women than U.S.-born women reported having three or more live births (30.2 percent vs. 17.7 percent).⁴

Women who were not pregnant or seeking pregnancy were asked: "Are you or your male sex partner currently using a birth control method to prevent pregnancy?"

In the combined 2004-2005 survey, 2,900 women answered this question. The highlights are as follows:

- Eight in 10 respondents (80.0 percent) reported that they or their partners are currently using a birth control method to prevent pregnancy.
- Birth control usage did not vary much according to the number of live births a woman had. Women with three or more live births had the lowest birth control use (76.4 percent); 81.0 percent of women who had not delivered a live birth used birth control, a proportion similar among women who delivered up to two live births.

Parity and Birth Control Use Among California Women Ages 18-44 California Women's Health Survey (CWHS), 2004-2005

California Department of Public Health
Maternal, Child and Adolescent Health/Office of Family Planning

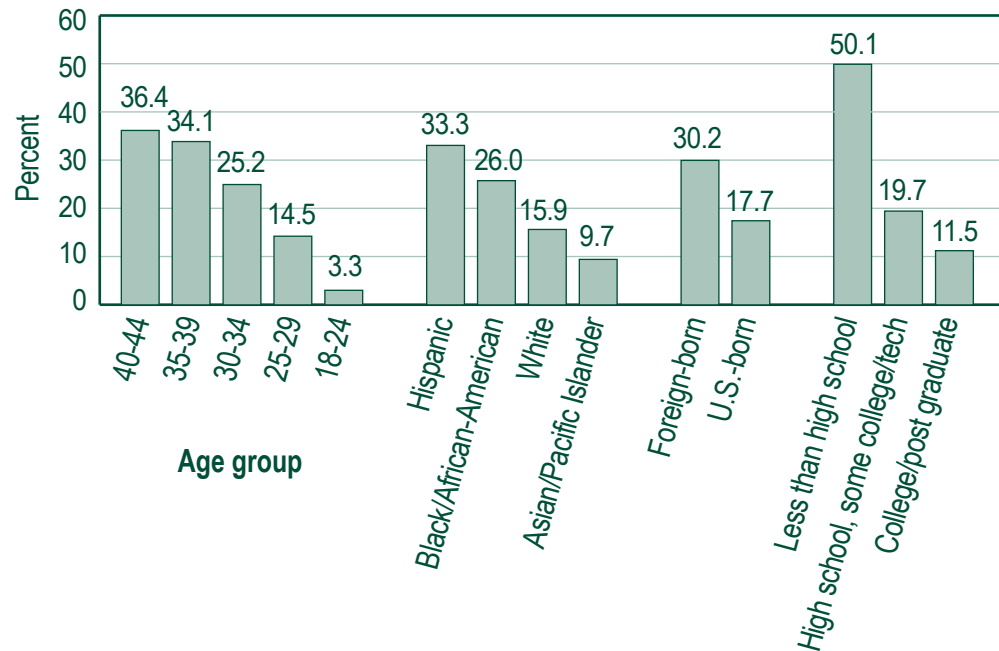
Public Health Message:

Most California women and their partners use birth control to prevent pregnancy. Women with many children and little spacing between pregnancies may be at greater risk of poor health in later life. Further efforts are needed to inform women about the benefits of consistent and accurate use of contraception.

**Parity and Birth
Control Use Among
California Women
Ages 18-44
California Women's
Health Survey
(CWHS), 2004-2005**

California Department of
Public Health
Maternal, Child and
Adolescent Health/Office of
Family Planning

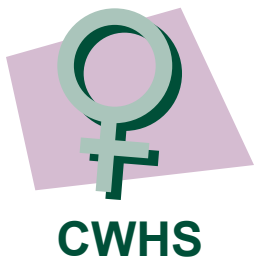
**Characteristics of Women Aged 18-44 Reporting Having Delivered
Three or More Live Births**



Source: California Women's Health Survey, 2004-2005

- 1 Sonfield, A. *Preventing Unintended Pregnancy: The Need and the Means*. The Guttmacher Report: vol 6(5), December 2003.
- 2 $P < 0.0001$, chi-square test
- 3 $P < 0.0001$, chi-square test
- 4 $P < 0.0001$, chi-square test

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

Neural tube defects (NTDs), which affect the formation of the brain and spine early in pregnancy, occur in one out of every 1,480 pregnancies in California.¹ These serious and often fatal birth defects often arise before a woman realizes she is pregnant and can be reduced by 50 percent to 70 percent by taking the daily B vitamin folic acid starting at least one month before conception and through the first three months of pregnancy.² About 95 percent of NTDs arise in pregnancies of women with no personal or family history of the problem. Risk factors include Hispanic ethnicity, young age, obesity, and poor diet.³⁻⁵ Studies have shown that even among high-risk populations, daily folic acid consumption may reduce the incidence of NTDs.⁶

The United States (U.S.) Public Health Service and numerous other organizations recommend that women who could become pregnant should consume at least 0.4 mg of folic acid daily through dietary supplements, fortified foods, or a combination of the two. In addition, women should consume foods naturally containing folate from a varied diet.⁷ Because many pregnancies are unplanned, it is important for all women of reproductive age to adhere to these national recommendations. The national Healthy People 2010 goal is for 80 percent of all women of reproductive age to consume 0.4 mg of folic acid daily.

In 1998, the U.S. Food and Drug Administration (USDA) required mandatory fortification of enriched cereal grains in an effort to increase folic acid levels among women of reproductive age. However, the

amount of folic acid added to most grain products is small, and many women are not eating enough servings of fortified grains or foods naturally high in folic acid daily to meet the U.S. Public Health Service recommendation.⁸ The easiest way to achieve the recommended amount of folic acid daily is by eating one serving of breakfast cereal fortified with 100 percent of the recommended daily allowance (RDA) of folic acid or by taking a 0.4 mg folic acid-containing supplement.⁹

In 2004 and 2005, respondents to the California Women's Health Survey (CWHS) were asked whether they were currently taking a prenatal or multivitamin pill or a pill containing the B vitamin folate or folic acid, and whether they were taking these supplements daily. Data from both survey years were combined and limited to women of reproductive age (aged 18 to 44), forming a sample of 4,445 women. Their responses were stratified by age, race/ethnicity, pregnancy status and pregnancy intent, the number of births to the woman, and body mass index (BMI) for overweight status.

The CWHS also has an abbreviated six-item food insecurity scale adopted by the USDA,¹⁰ which is a measure of access to food and availability of food in the household. Answers were examined with regard to daily folic acid supplement intake.

Highlights of these analyses are as follows:

- Of respondents aged 18 to 44 years, 39.8 percent reported taking a folic acid-containing supplement daily. Daily

Folic Acid Use Among California Women of Reproductive Age, 2004-2005

California Department of Public Health
Maternal, Child and Adolescent Health/Office of Family Planning Branch

Public Health Message:

Population groups at the highest risk for NTDs—Hispanic women (especially those born outside the United States), younger women, obese women, and women with poor diet quality—are the least likely to take folic acid supplements. Folic acid should be as aggressively promoted to all women of reproductive age as prenatal vitamins now are to pregnant women.

Folic Acid Use Among California Women of Reproductive Age, 2004-2005

California Department of Public Health
Maternal, Child and Adolescent Health/Office of Family Planning Branch

supplement use varied significantly by pregnancy status, age, race/ethnicity, parity, BMI, and food insecurity.

- Women who were currently pregnant were much more likely to report taking a folic acid-containing supplement daily (88.8 percent) than women who were trying to become pregnant (54.1 percent) or women who were neither pregnant nor trying to become pregnant (36.5 percent).¹¹
- Younger women (aged 18 to 24) were much less likely to report taking a daily supplement with folic acid (29.3 percent) than women aged 25 to 34 (41.5 percent) or age 35-44 (43.2 percent).¹¹
- Hispanic women were much less likely to report the daily use of a folic acid-containing supplement (27.7 percent) than were Whites (49.8 percent), Black/African Americans (41.3 percent), or Other racial/ethnic groups (38.8 percent).¹¹
- The daily use of a folic acid-containing supplement was reported by 40.1 percent of respondents who had never given birth, 46.3 percent of women with one previous birth, and 37.2 percent of women with two or more previous births.¹¹
- Women of normal weight (BMI < 25) were more likely to report taking a daily supplement with folic acid (42.1 percent) than were overweight (BMI 25-29) and obese (BMI ≥ 30) women (40.2 percent and 37.6 percent, respectively).¹²
- Women who reported experiencing food insecurity within the previous 12 months were less likely to take a folic acid-containing supplement daily than those who did not (29.0 percent vs 44.9 percent).¹¹

We explored two sub-groups of women because of their elevated risk for NTDs: women who are trying to become pregnant and Hispanic women. Among women who were trying to become pregnant (N=234), results were generally similar to the overall population, but distributions by age, number of births, and race/ethnicity were notable:

- Women aged 18 to 24 were much less likely to report the daily use of a folic acid-containing supplement (31.7 percent) than women age 25-34 (53.2 percent) and women age 35-44 (62.9 percent).¹³
- Women who had never given birth (59.3 percent) and women with one previous birth (61.8 percent) were more likely to report using a folic acid-containing supplement daily vs. women with two or more previous births (33.6 percent).¹³
- Hispanic women who were trying to become pregnant (30.0 percent) were much less likely to use a daily folic acid-containing supplement than were women of all other racial/ethnic groups (68.4 percent).¹¹

Hispanic respondents were much less likely than women of other racial/ethnic groups to report daily use of a folic acid-containing supplement. This is especially troubling because the literature indicates that Hispanic women are at higher risk for NTDs. Pregnancies resulting in a NTD are five times more common among women in Mexico than among Caucasian women in the United States.^{1,14} Hispanic women living in the United States also have a higher risk of NTDs, although the incidence is not nearly as high as for women in Mexico.^{7,15}

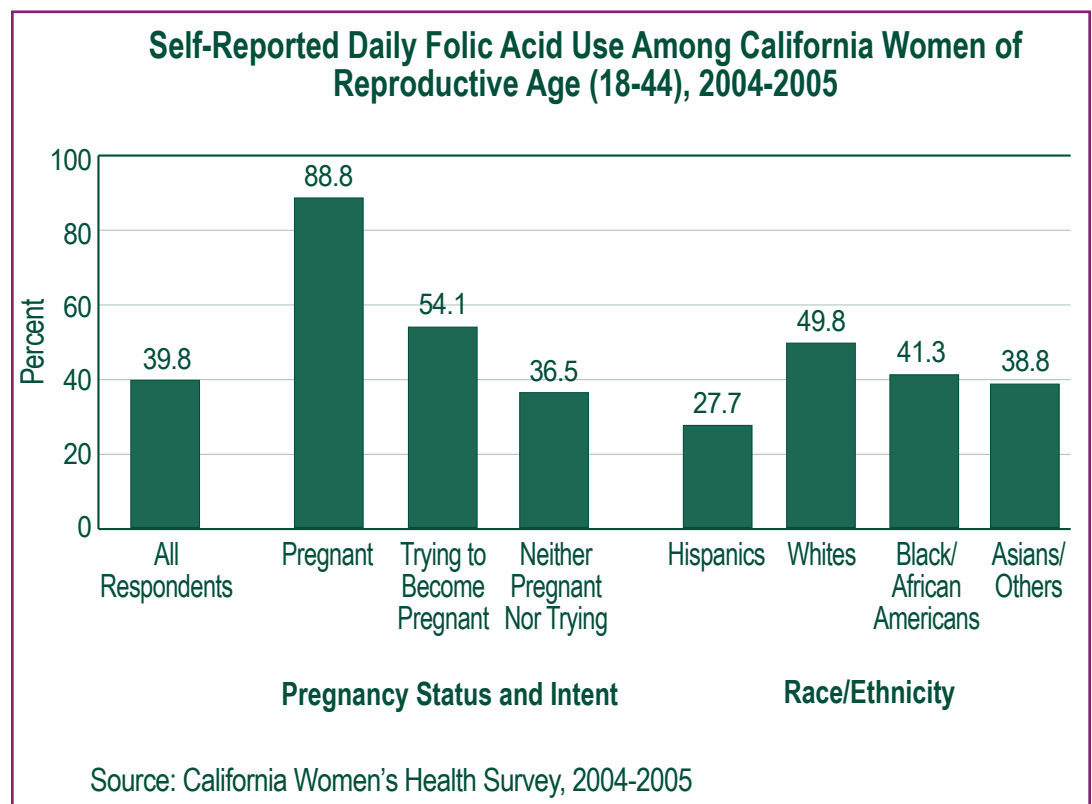
Among Hispanic women responding to the 2004 and 2005 CWHHS (N=1,894), daily folic acid-containing supplement use did not vary significantly by age or BMI, but did vary significantly by place of birth, number of births, and food insecurity.

Folic Acid Use Among California Women of Reproductive Age, 2004-2005

California Department of Public Health
Maternal, Child and Adolescent Health/Office of Family Planning Branch

- Of Hispanic women born in the United States, 35.4 percent reported taking a folic acid-containing vitamin daily, compared to only 22.9 percent of Hispanic women born in Mexico, and 27.8 percent of Hispanic women born in a country other than the United States or Mexico.¹¹
- Hispanic women who had never given birth (35.5 percent) were more likely to be taking daily folic acid than women with one previous birth (28.7 percent) and women with two or more previous births (25.0 percent).¹⁶
- Hispanic women who reported food insecurity within the previous 12 months were less likely to take a daily folic acid supplement than those who were food secure (23.0 percent vs. 32.9 percent, respectively).¹¹

Prenatal vitamin promotion efforts appear successful at encouraging folic acid intake among pregnant women: 88.8 percent of pregnant California women and 83.4 percent of pregnant Hispanic women reported taking a vitamin supplement containing folic acid. But California is still far from meeting the Healthy People goal of 80 percent for women of reproductive age. Only about 40 percent of all women of reproductive age and 28 percent for Hispanic women of reproductive age reported taking folic acid supplementation.

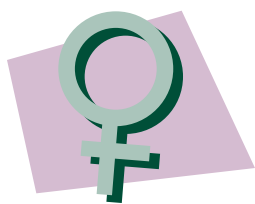


Folic Acid Use Among California Women of Reproductive Age, 2004-2005

California Department of
Public Health
Maternal, Child and
Adolescent Health/Office of
Family Planning Branch

- 1 California Birth Defects Monitoring Unit. www.cbdmp.org/bd_neural.htm
- 2 Milunsky A, Jick H, Jick SS, et al. Multivitamin/folic acid supplementation in early pregnancy reduces the prevalence of neural tube defects. *JAMA* 1989;262(20):2847-2852.
- 3 Shaw GM, Velie EM, Schaffer D. Risk of neural tube defect-affected pregnancies among obese women. *JAMA* 1996;275(14):1093-1096.
- 4 Carmichael SL, Shaw GM, Selvin S, Schaffer DM. Diet quality and risk of neural tube defects. *Med Hypotheses* 2003;60(3):351-355.
- 5 Shaw GM, Velie EM, Wasserman CR. Risk for neural tube defect-affected pregnancies among women of Mexican descent and white women in California. *Am J Public Health* 1997;87(9):1467-1471.
- 6 Centers for Disease Control and Prevention (CDC). Neural tube defect surveillance and folic acid intervention--Texas-Mexico border, 1993-1998. *MMWR Morb Mortal Wkly Rep* 2000;49(1):1-4.
- 7 Institute of Medicine. *Dietary Reference Intakes for Thiamin, Riboflavin, Niacin, Vitamin B6, Folate, Vitamin B12, Pantothenic Acid, Biotin and Choline*. Washington, DC: National Academy Press; 1998.
- 8 Centers for Disease Control and Prevention (CDC). Folate status in women of childbearing age, by race/ethnicity--United States, 1999-2000, 2001-2002, and 2003-2004. *MMWR Morb Mortal Wkly Rep* 2007;55(51-52):1377-1380.
- 9 Williams JL, Abelman SM, Fasset EM, et al. Health care provider knowledge and practices regarding folic acid, United States, 2002-2003. *Matern Child Health J* 2006;10(5 Suppl):67-72.
- 10 Bickel G, Nord M, Price C, Hamilton W, Cook J. *Guide to Measuring Household Food Security, Revised 2000*. US Department of Agriculture, Food and Nutrition Service, Alexandria VA. March 2000.
- 11 Chi square test, $P < .0001$.
- 12 Chi square test, $P < .05$.
- 13 Chi square test, $P < .01$.
- 14 Harris JA, Shaw GM. Neural tube defects--why are rates high among populations of Mexican descent? *Environ Health Perspect* 1995;103 Suppl 6:163-164.
- 15 Chavez GF, Cordero JF, Becerra JE. Leading major congenital malformations among minority groups in the United States, 1981-1986. *MMWR CDC Surveill Summ* 1988;37(3):17-24.
- 16 Chi square test, $P < .0007$.

Submitted by: Aldona Herrndorf, M.P.H., Suzanne Haydu, M.P.H., R.D., Lori Llewelyn, M.P.P., California Department of Public Health, Maternal, Child and Adolescent Health/Office of Family Planning Branch, (916) 650-0398, Aldona.Herrndorf@cdph.ca.gov



CWHS

Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

Concurrent sexual partnership, or overlapping partnerships in a given time period, increases the risk of sexually transmitted disease (STD) transmission. This type of sexual partnering can efficiently spread STDs because an infected individual can infect other partners in a relatively short period of time.^{1,2} Medical provider assessment of whether a woman's partner has other sex partners can help direct efforts for targeted STD screening. Data on the prevalence of sexual concurrency among male partners of California women are lacking. The STD Control Branch sought to estimate the prevalence of male partner concurrency and its association with factors related to STD infection (e.g., age, race/ethnicity, marital status).

In the 2004 California Women's Health Survey (CWHS), 2,219 women aged 18 to 50 years were asked: *"Thinking about your current or most recent male sex partner, how likely is it that this partner was having sex with anyone else besides yourself while you were together?"*

Response options were on a five-item scale and were categorized into two groups for analysis: those responding "Definitely yes," "Very likely" and "Somewhat likely" were grouped into a "Likely" category, while responses of "Not very likely" and "Definitely no" were combined as "Not likely." Highlights of the results are as follows:

- Overall, 11.3 percent of respondents answered "Definitely yes," "Very likely" or "Somewhat likely" that their current or most recent male partner was in a concurrent sexual relationship.
- Higher proportions of Black/African American women (21.0 percent) and Hispanic women (19.2 percent) than

proportions of women who were White (5.9 percent) or of Asian/Other race/ethnicity (6.4 percent) reported that their male partners were likely involved in a concurrent relationship.³

- Rates of likely partner concurrency varied across age categories: 18- to 24-year-old women reported the highest rate (15.7 percent), and 45- to 50-year-olds reported the lowest rate (7.8 percent).⁴
- In the 25- to 34-year-old age group,⁵ 29.1 percent of Black/African American women, 15.9 percent of Hispanic women, and 4.8 percent of White women reported likely male partner concurrency.^{3,6}
- In the 35- to 44-year-old age group, 21.2 percent of Hispanic women, compared with 6.1 percent of White women, reported likely male partner concurrency.^{3,6,7}
- In the 45- to 50-year-old age group, a significantly higher rate of likely male partner concurrency was reported among Hispanic women (22.3 percent) than among White women (3.5 percent).^{3,6,7}
- Women in committed, unmarried relationships (21.9 percent) reported rates of likely male partner concurrency similar to those reported by women who never married (17.0 percent), while married women (6.7 percent) reported a much lower rate.³
- Married Hispanic women (14.1 percent) reported significantly higher rates of likely partner concurrency than did married white women (2.7 percent).^{3,6,7}

Concurrent Sexual Partnerships Among Male Sex Partners of California Women, 2004

California Department of Public Health,
Sexually Transmitted Disease Control Branch

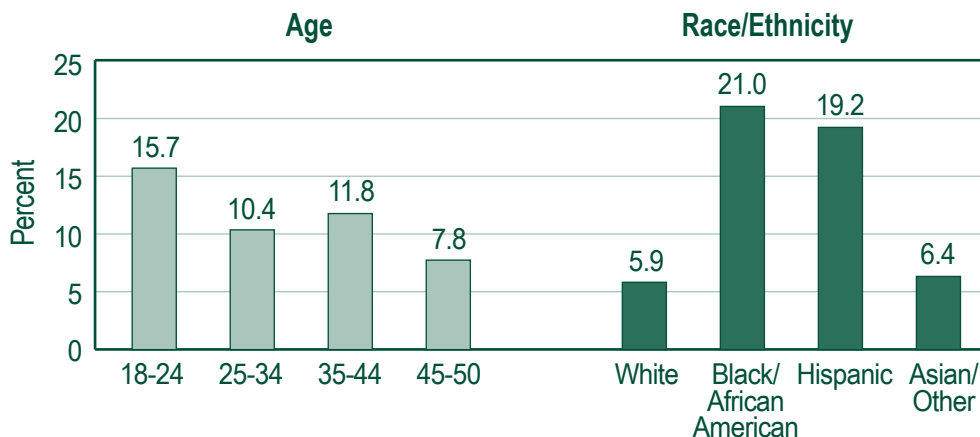
Public Health Message:

Disparities in the prevalence of likely male partner concurrency are consistent with observed racial/ethnic disparities in STD rates. Including partner concurrency status in sexual risk assessment can help guide the need for targeted STD screening and testing, especially in older women and those in committed relationships, who are currently assumed to be at lower risk for STDs.

Concurrent Sexual Partnerships Among Male Sex Partners of California Women, 2004

California Department of Public Health,
Sexually Transmitted Disease Control Branch

Women Who Reported That It Was Likely Their Male Sexual Partner Was in a Concurrent Sexual Relationship, 2004



Note: The "Asian/Other" category for the 18- to 24-year-old and 45- to 50-year-old groups contains zero observations.

Source: California Women's Health Survey, 2004

- 1 Adimora AA, Schoenbach VJ, Bonas DM, Martinson FE, Donaldson KH, Stancil TR. Concurrent sexual partnerships among women in the United States. *Epidemiology* 2002;13(3):320-327.
- 2 Aral SO, Patel DA, Holmes KK, Foxman B. Temporal trends in sexual behaviors and sexually transmitted disease history among 18- to 39-year-old Seattle, Washington, residents: results of random digit-dial surveys. *Sex Transm Dis* 2005;32(11):710-717.
- 3 $p < .001$ for all listed comparisons.
- 4 $p < .05$.
- 5 Inadequate sample size ($n < 10$) for 18- to 24-year-olds did not allow for stable estimates by race/ethnicity.
- 6 Inadequate sample size ($n < 10$) for Asian/Other did not allow for a stable estimate for this age group. (The Asian/Other group also includes American Indians/Alaskan Natives.)
- 7 Inadequate sample size ($n < 10$) for Black/African Americans did not allow for a stable estimate for this age group.

Submitted by: Adrienne Rain Mocello, M.P.H., Joan M. Chow, Dr.P.H.,
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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

Some sexually transmitted diseases (STDs) can cause serious long-term health complications years after infection. If left untreated, STDs can cause pelvic inflammatory disease, infertility, cancer of the reproductive tract, and other health problems in women. Although studies show that adolescent females know of the association between STDs and future reproductive health problems such as infertility,¹ no published studies show that adult women are aware of this association.

Protection Motivation Theory holds that personal assessment of the consequences of current risk is associated with future behavior.² In addition, the *severity* of a perceived threat is a main predictor of behavior change. Education about the risks of untreated STDs could be a viable motivational tool for increasing patient-initiated testing and treatment and for changing individual behaviors. The STD Control Branch sought to assess California women's awareness of long-term consequences of STDs and to determine the content of this knowledge.

In the 2005 California Women's Health Survey (CWHS), 4,623 women aged 18 years and older were asked: "As far as you know, are there any long-term health problems a WOMAN might experience if she has had a sexually transmitted disease?"

Women who answered "Yes" were then asked: "Please tell me about all the long-term health problems you've ever heard of (caused by an STD)."

These responses were grouped for analysis into two categories ("Yes" or "No"), indicating the ability to correctly name at least one adverse outcome: infertility, increased risk of

cervical cancer or other genital cancers, pregnancy and birth-related complications, pelvic inflammatory disease, blindness, mental illness/neurological damage, scarring (of reproductive organs), life-long recurrence of symptoms/always having to take medication, increased risk of human immunodeficiency virus infection, or death.³

Highlights of the responses were as follows:

- Most respondents (74.4 percent) answered "Yes," that a woman might experience long-term health problems from an STD. The remaining 25.6 percent answered either "No" (19.5 percent) or "I don't know" (6.1 percent).
- White women were most likely to answer that there were long-term consequences of STDs (84.5 percent), followed by Blacks/African Americans (74.6 percent), Hispanics (60.0 percent), and women in the Asian/Other race/ethnicity group (62.7 percent).⁴

Of the women who answered that adverse long-term outcomes may result from STDs:

- Most women (85.1 percent) correctly named one or more specific long-term health consequences, while 32.4 percent named just one consequence, 28.7 percent named two, 16.2 percent named three, and 7.8 percent named four or more consequences.
- Most Black/African American women (91.8 percent) and White women (88.2 percent) could name at least one long-term health consequence, while Hispanic women were significantly less likely to be able to do so (76.1 percent).⁵

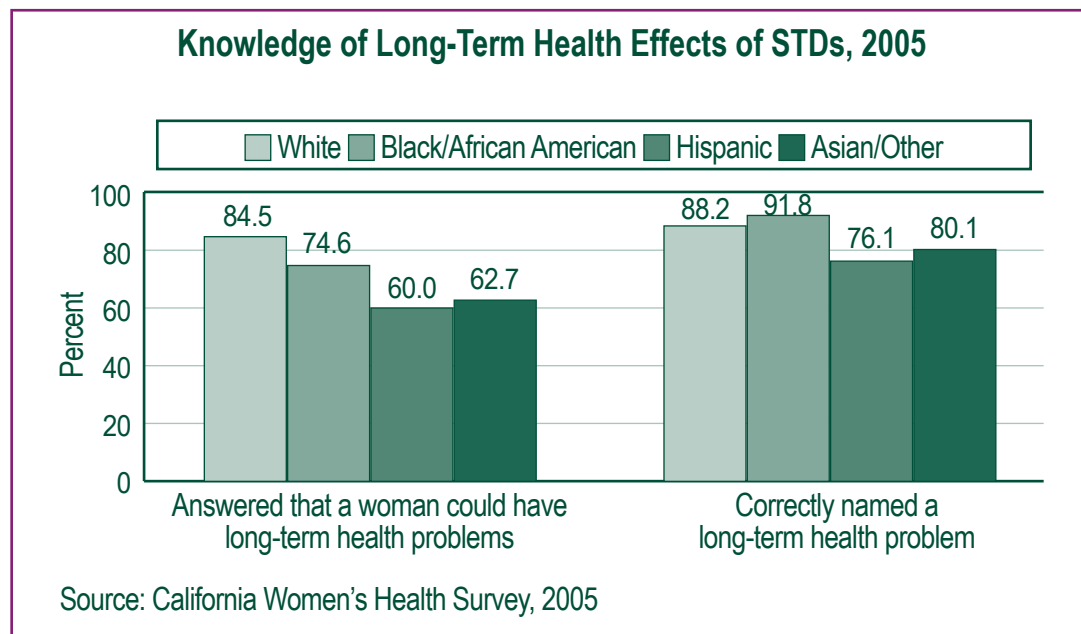
Knowledge of Adverse Long-Term Consequences of Sexually Transmitted Diseases, 2005

California Department of Public Health, Sexually Transmitted Disease Control Branch

Public Health Message: Awareness of the long-term health problems that could result from STDs is high among California adult women. However, efforts to increase knowledge among Hispanic women and women in the Asian/Other race/ethnicity group of the association between STDs and future health problems are needed and may lead to increased utilization of STD prevention services.

Knowledge of Adverse Long-Term Consequences of Sexually Transmitted Diseases, 2005

California Department of
Public Health,
Sexually Transmitted
Disease Control Branch



- 1 Trent M, Millstein SG, Ellen JM. Gender-based differences in fertility beliefs and knowledge among adolescents from high sexually transmitted disease-prevalence communities. *J Adolesc Health* 2006;38(3):282-287.
- 2 Browes S. Health psychology and sexual health assessment. *Nurs Stand* 2006;21(5):35-39.
- 3 Because death is included in the list of adverse outcomes and is a widely known outcome of HIV infection, the results of this analysis may be driven largely by knowledge of HIV outcomes, but not of outcomes for other STDs.
- 4 $p < .05$ for all comparisons except for Hispanic compared to Asian/Other.
(Note: The Asian/Other race/ethnicity group includes American Indians/Alaska Natives).
- 5 $p < .01$.

Submitted by: Adrienne Rain Mocello, M.P.H., Joan M. Chow, Dr.P.H.,
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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

A couple is defined as infertile if they do not use contraception and the woman has not become pregnant within 12 months.¹ In 2002, 7.4 percent of United States married women aged 15 to 44 were infertile.¹ Findings from the 2003 California Women's Health Survey (CWHS) indicated that 4.6 percent of California women aged 18 to 50 reported receiving an infertility diagnosis.²

In 2005, CWHS participants were asked the following: "Have you ever been to a doctor or other health care provider to talk about ways to help you to ovulate or help you become pregnant?"

Nine percent (n = 420; representing over 1 million California women) of the respondents said that they had seen a doctor or other health care provider to discuss fertility. Women who had not delivered a live birth had higher rates than women who had at least one live birth (12.7 percent vs. 7.9 percent, respectively).

Respondent characteristics varied by age group, race/ethnicity, health insurance status, and poverty status.

- Young women (aged 18 to 24) had the lowest rates of consulting a doctor or health care provider for fertility issues (2.0 percent), followed by the oldest women, aged 65 and above (7.2 percent). Women in the 35-44 and 45-54 age groups (12.6 percent for each age group) reported the highest rates of consulting a doctor or health care provider.

- Hispanic women reported lower consultation rates with doctors or other health care providers to discuss fertility issues (4.8 percent), compared with Asian/Others (10.8 percent), Whites (10.6 percent), and Black/African Americans (9.3 percent).
- Higher proportions of respondents with current health insurance coverage discussed infertility with doctors or health care providers (9.7 percent), compared with respondents without current health insurance coverage (4.2 percent).
- Higher proportions of women living in households earning more than 200 percent of the federal poverty level (FPL) discussed infertility with their doctors or health care providers (11.2 percent) than women living in poorer households (5.5 percent).

Visit With a Doctor or Health Care Provider to Discuss Ovulation and/or Getting Pregnant

Department of Health
Care Services
California Department of
Public Health
Office of Women's Health

Public Health Message:

About one in 10 California women saw a doctor or a health care provider to discuss fertility issues in their lifetime. Using such services may be related to health insurance status, plans that cover the services, and knowledge about coverage by those plans. Outreach and educational efforts about the availability of these services could be targeted to women who need fertility services, but are less likely to go to a health care provider to discuss them.

Visit With a Doctor or Health Care Provider to Discuss Ovulation and/or Getting Pregnant

Department of Health
Care Services
California Department of
Public Health
Office of Women's Health

Visit With a Doctor or Health Care Provider to Discuss Ovulation or Getting Pregnant

	Percent Reporting (N=4278)
Overall	9.0
Had a Live Birth^a	
Yes	7.9
No	12.7
Age Group^a	
18-24	2.0
25-34	7.4
35-44	12.6
45-54	12.6
55-64	10.0
65 +	7.2
Race/Ethnicity^a	
White	10.6
Black/African American	9.3
Hispanic	4.8
Asian/Other	10.8
Has Health Insurance^a	
Yes	9.7
No	4.2
Poverty Status^a	
< 200 % of federal poverty level	5.5
> 200 % of federal poverty level	11.2
Unknown	6.1

a - Subcategories under each characteristic differ statistically, chi-square test, P < .05.

Source: California Women's Health Survey, 2005

- 1 Chandra A, Martinez GM, Mosher WD, Abma JC, Jones J; Division of Vital Statistics. *Fertility, Family Planning and Reproductive Health of U.S. Women: Data From the 2002 National Survey of Family Growth*. Series 23, No 25. Centers for Disease Control and Prevention; December 2005. Available at: http://www.cdc.gov/nchs/data/series/sr_23/sr23_025.pdf
- 2 Chow J, Lifshay J, Bolan G. *Infertility: Problems Getting Pregnant and Past Infertility Diagnosis Among California Women, 2003*. California Department of Health Services, Office of Women's Health. Data Points: Results from the California Women's Health Survey; 2003-2004. Available at: http://www.dhs.ca.gov/director/owh/owh_main/cwhs/wmns_hlth_survey/03-04_data_points/060703%20Data%20Points%20Press.pdf

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

A couple is defined as infertile if they do not use contraception and the woman has not become pregnant within 12 months.¹ In 2002, 7.4 percent of United States married women ages 15-44 were infertile.¹ In 2003, the California Women's Health Survey (CWHS) found that 4.6 percent of California women aged 18 to 50 reported receiving an infertility diagnosis.²

This study obtained baseline data regarding the use of fertility services by California women. In 2005, all CWHS participants were asked:

"Have you ever been to a doctor or other health care provider to talk about ways to help you to ovulate or help you become pregnant?"

Those who responded affirmatively (n = 420) were asked: *"Which of the following services have you had to help you ovulate or become pregnant?"* (See Table for the list of services.)

Specific services were named by 413 respondents; women using multiple services were counted more than once accordingly. Due to the small sample sizes, categories were combined to compare two age groups (18-44 years vs. ≥ 45 years), two race/ethnicity groups (Whites vs. non-Whites), and women who had delivered a live birth vs. ones who had not.

The number of fertility services reported per respondent ranged from one to eight, with approximately half of the respondents using more than two services. The most commonly reported service was receiving advice (81.9 percent), followed by infertility testing (60.2 percent), fertility drugs to improve ovulation (49.8 percent), artificial insemination (18.3 percent), corrective surgery (16.1 percent),

in vitro fertilization (13.9 percent), surgery/treatment for uterine fibroids (12.5 percent), complementary medicine (11.8 percent), and "other types of fertility services" (5.1 percent). The most frequently reported types of complementary medicine used were acupuncture and Chinese medicine, and the most frequent response to "other types of fertility services" was treatment for endometriosis.

Highlights of the study are as follows:

- Significantly different rates were reported by women who had delivered a live birth vs. those who had not for the following services: receiving advice (79.0 percent vs. 87.7 percent respectively), infertility testing (55.3 percent vs. 70.1 percent) and corrective surgery (19.7 percent vs. 8.7 percent).
- Older women (≥ 45 years) were more likely than younger women to report corrective surgery (20.6 percent vs. 11.7 percent respectively) and surgery/treatments for uterine fibroids (17.2 percent vs. 8.0 percent). On the other hand, younger women were more likely than older women to report in vitro fertilization (18.0 percent vs. 9.6 percent) and the use of complementary medicine (15.4 percent vs. 8.0 percent).
- The rate of reported infertility testing varied significantly between the two race/ethnicity groups: 65.4 percent of White women reported infertility testing vs. 51.3 percent of non-White women.

Use of Fertility Services Among Women Seeking Help to Ovulate or Become Pregnant

Department of Health
Care Services
California Department of
Public Health
Office of Women's Health

Public Health Message:

California women use a wide range of fertility services, with different outcomes and different procedural complexities. More information and research are needed to identify successful fertility services outcomes and to learn about their long-term health effects.

Use of Fertility Services Among Women Seeking Help to Ovulate or Become Pregnant

Department of Health
Care Services
California Department of
Public Health
Office of Women's Health

Use of Fertility Services By California Women, By Demographic Characteristics (Percent of Women Reporting Using Fertility Services, N=413), California 2005

Fertility Services	Percent Using Services ^a	History of Live Birth		Age Group		Race/Ethnicity	
		Yes (n = 282)	No (n = 130)	18-44 (n = 178)	45+ (n = 235)	White (n = 291)	Non-White (n = 122)
Advice	81.9	79.0	87.7 ^b	80.6	83.2	84.2	77.9
Infertility Testing	60.2	55.3	70.1 ^b	59.9	60.4	65.4	51.3 ^d
Fertility Drugs	49.8	50.8	47.8	50.5	49.1	52.4	45.3
Artificial Insemination	18.3	19.6	15.5	19.6	16.9	21.2	13.3
Corrective Surgery	16.1	19.7	8.7 ^b	11.7	20.6 ^c	17.8	13.3
In Vitro Fertilization	13.9	14.0	13.7	18.0	9.6 ^c	12.9	15.5
Surgery/Treatment for Uterine Fibroids	12.5	13.7	10.0	8.0	17.2 ^c	12.1	13.2
Complementary/Alternative Medicine	11.8	9.8	15.9	15.4	8.0 ^c	10.2	14.5
Other Types of Fertility Services	5.1	5.9	^e	^e	6.0	6.1	^e

^a Services to ovulate or become pregnant; results are not mutually exclusive, i.e., women who used multiple services were counted for each service they reported. Information on live birth delivery is missing for one respondent.

^b Statistically significant results for comparison of responses of women who did not give live birth with women who gave live birth (chi-square test, $P < .05$).

^c Statistically significant results for comparison of 18-44 age group with > 45 age group (chi-square test, $P < .05$).

^d Statistically significant results for comparison of Whites and non-Whites (chi-square test, $P < .05$).

^e Sample size is too small for results to be reliable.

Source: California Women's Health Survey, 2005

- 1 Chandra A, Martinez GM, Mosher WD, Abma JC, Jones J; Division of Vital Statistics. *Fertility, Family Planning and Reproductive Health of U.S. Women: Data From the 2002 National Survey of Family Growth*. Series 23, No 25. Centers for Disease Control and Prevention; December 2005. Available at: http://www.cdc.gov/nchs/data/series/sr_23/sr23_025.pdf
- 2 Chow J, Lifshay J, Bolan G. *Infertility: Problems Getting Pregnant and Past Infertility Diagnosis Among California Women, 2003*. California Department of Health Services, Office of Women's Health. Data Points: Results from the California Women's Health Survey; 2003-2004. Available at: http://www.dhs.ca.gov/director/owh/owh_main/cwhs/wmns_hlth_survey/03-04_data_points/060703%20Data%20Points%20Press.pdf

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

Uterine fibroids are benign (non-cancerous) tumors or growths made of muscle cells and other tissues that grow within the wall of the uterus (womb).¹ Uterine fibroids may cause prolonged or heavy menstrual bleeding, pelvic pain or fertility problems.

Uterine fibroids are the fifth leading cause of hospitalization for gynecologic disorders unrelated to pregnancy among United States (U.S.) women aged 15 to 44, and they are the most frequent reason for hysterectomy (surgery to remove the uterus) among U.S. women of all ages.^{2,3}

To obtain a baseline estimate of the prevalence of uterine fibroids among California women, the 2005 California Women's Health Survey (CWHS) asked the following question of respondents aged 18 and older: "Has a doctor or other medical care provider ever told you that you had uterine fibroids?"

More than 700 women, about 14.3 percent of the respondents (N = 4,284), reported being told that they had fibroids.

- Prevalence of uterine fibroids differed statistically between women aged 18 to 44 (6.6 percent) and women aged 45 and older (23.6 percent).⁴
- Prevalence also differed statistically by race/ethnicity: Black/African Americans reported the highest rates (25.9 percent), followed by Whites (16.8 percent), Asian/ Others (11.5 percent), and Hispanics (7.9 percent).⁴
- Almost four times more respondents with uterine fibroids stated that they had had a hysterectomy (47.6 percent) than women without uterine fibroids (12.5 percent).⁴
- More women with uterine fibroids sought fertility services to help them ovulate or become pregnant (16.5 percent) than women without uterine fibroids (7.7 percent).⁴ Almost half of the women with uterine fibroids who sought fertility services reported that they had undergone surgery or drug treatment for their fibroids.

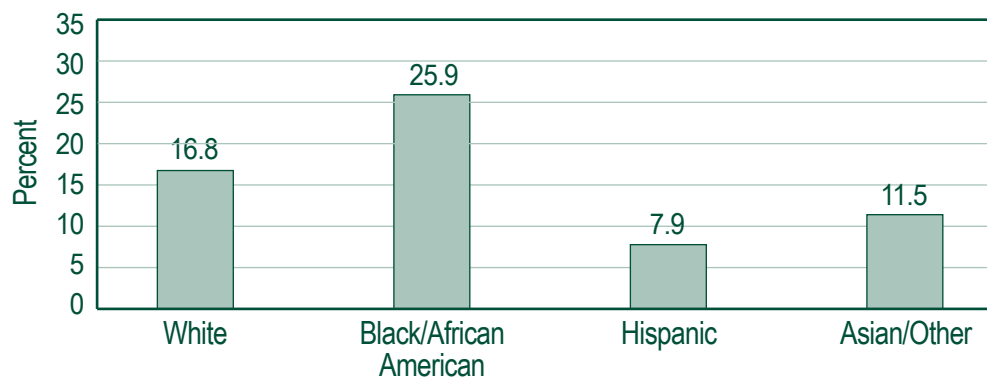
History of Uterine Fibroids Reported by California Women

Department of Health
Care Services
California Department of
Public Health
Office of Women's Health

Public Health Message:

Uterine fibroids are a treatable condition that are associated with fertility problems and may result in hysterectomy. Differences in prevalence rates and the course of the condition could be explained by differences in access and use of health care services. Education and research are needed to increase knowledge of uterine fibroids, find new methods of treatment, and develop alternatives to hysterectomy.

Women Reporting That They Were Ever Diagnosed With Uterine Fibroids, by Race/Ethnicity, California, 2005



Source: California Women's Health Survey, 2005

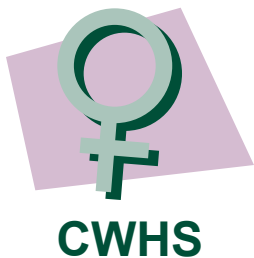
Issue 5, Summer 2008, Num. 15

History of Uterine Fibroids Reported by California Women

Department of Health
Care Services
California Department of
Public Health
Office of Women's Health

- 1 The National Women's Health Information Center. Uterine Fibroids. US Department of Health and Human Services, Office on Women's Health; July 2007. Available at: <http://www.healthywomen.org/healthtopics/fibroids>
- 2 The National Women's Health Information Center. Hysterectomy. US Department of Health and Human Services, Office on Women's Health; July 2007. Available at: <http://www.healthywomen.org/Page.do?pageCode=healthcenter-hysterectomy>
- 3 Marshall LM, Spiegelman D, Barbieri RL, et al. Variation in the incidence of uterine leiomyoma among premenopausal women by age and race. *Obstet Gynecol* 1997; 90(6): 967-973.
- 4 Comparisons differ statistically, chi-square test, $P < .05$.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

Living in safe neighborhoods (both actual and perceived) is associated with behaviors that prevent obesity, particularly increased physical activity.¹ In a statewide telephone survey in the Midwest, respondents who felt that their neighborhoods were unsafe and unpleasant were 1.5 times more likely to be overweight than those who said they considered their neighborhoods to be safe and pleasant.² This is a relatively new area of study, and it is not clear what aspect of neighborhood safety is most related to maintaining a healthy weight. It is possible that the amenities that cause a neighborhood to be seen as safer and more pleasant contribute to an environment that is more conducive to physical activity and a healthy lifestyle.

The 2005 California Women's Health Survey (CWHS) was administered to 4,623 women, proportionally weighted to the 2000 U.S. Census. Respondents were asked three questions about how they perceived their neighborhoods in terms of crime, traffic safety and pleasantness. Each item received a score from 1 (most negative) to 4 (most positive). Responses were combined into a three-item composite score, ranging from 12 (highest neighborhood satisfaction) to 3 (lowest neighborhood satisfaction). Differences between means were tested using Analysis of Variance.

All women were asked their height and weight to calculate body mass index (BMI, a measure of body density), except for those who were pregnant or six months post-partum or less. Categories of weight were as follows:

- Underweight: BMI < 18.5
- Healthy weight: BMI 18.5 - 24.9
- Overweight: BMI 25 - 29.9

- Obese: BMI \geq 30

Women were also asked on how many days each week they were moderately or vigorously physically active for at least 30 minutes. Those who fulfilled these criteria at least five days per week were categorized as meeting physical activity recommendations.³

Highlights of the survey are as follows:

- Most respondents (59.8 percent) perceived their neighborhoods as "very pleasant" places, 30.7 percent as "somewhat pleasant," 6.9 percent as "somewhat unpleasant," and 2.7 percent as "very unpleasant."
- More than half of respondents (53.4 percent) reported that they felt their neighborhoods to be "very safe" from criminal activity, 35.3 percent reported "somewhat safe," 8.5 percent reported "somewhat unsafe," and only 2.9 percent reported "very unsafe."
- Perception of traffic safety was more mixed; 38.7 percent reported "very safe," 43.0 percent reported "somewhat safe," 14.2 percent reported "somewhat unsafe," and 4.0 percent reported "very unsafe."
- Most respondents were very satisfied with one or more characteristics of their neighborhoods: nearly two out of three gave a combined neighborhood score of 10, 11 or 12; another 29.7 percent had more mixed feelings, scoring 7, 8, or 9. Only 6.0 percent of the women scored 6 or lower.

The Relationship between Healthy Weight, Physical Activity and Neighborhood Environmental Factors among California Women, 2005

California Department of Public Health
Cancer Prevention and Nutrition Section

Public Health Message:

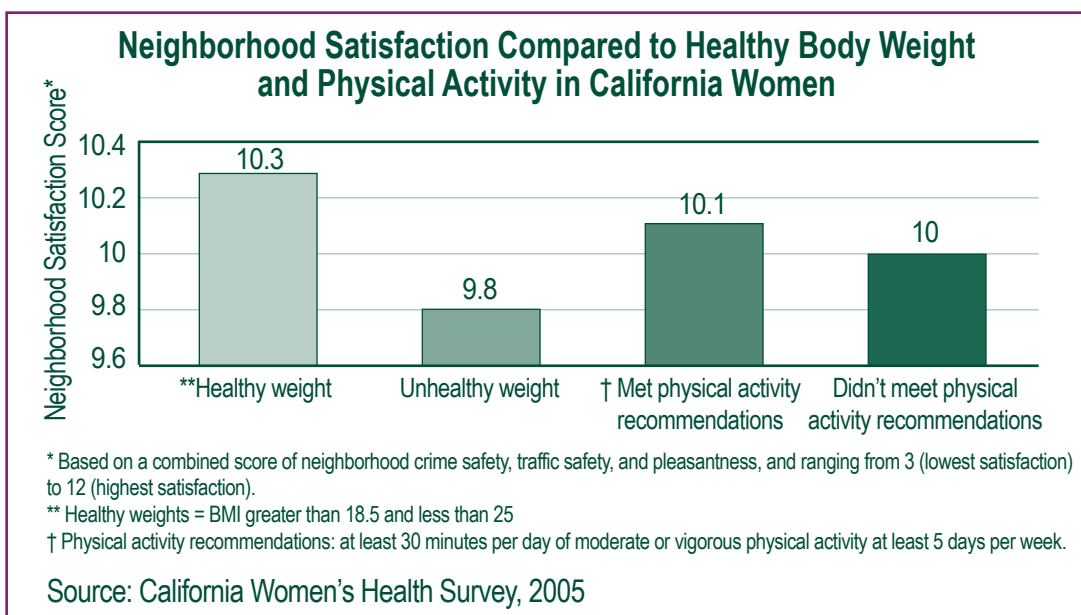
Neighborhood crime, traffic safety, and pleasantness have not traditionally been recognized areas for public health intervention. However, identification of the relationship between these environmental factors and healthy body weight and achieving adequate physical activity suggest these are appropriate and desirable issues of concern for public health professionals. People working to achieve obesity prevention goals in the public health sector should participate in programs and partnerships designed to improve neighborhood environments.

Issue 5, Summer 2008, Num. 16

The Relationship between Healthy Weight, Physical Activity and Neighborhood Environmental Factors among California Women, 2005

California Department of Public Health
Cancer Prevention and Nutrition Section

- Fewer than half of the respondents (46.9 percent) had a healthy weight, 27.8 percent were overweight, 22.5 percent were obese, and 2.9 percent were underweight. Women with a healthy weight had significantly higher scores than those with an unhealthy weight (including both overweight and underweight women) on perceived overall neighborhood safety and satisfaction (10.3 vs. 9.8, respectively), perceived neighborhood crime (3.5 vs. 3.3, respectively), perceived safe neighborhood traffic (3.2 vs. 3.1, respectively), and perceived neighborhood pleasantness (3.6 vs. 3.4, respectively) ($P < .0001$ for all).
- Less than half the respondents (41.8 percent) reported at least 30 minutes per day of physical activity five or more days per week. Those who met these recommendations were more likely than women who did not to have higher scores on the perceived overall neighborhood safety and satisfaction scale (10.1 vs. 10.0, respectively $P < .02$) and on perceived neighborhood pleasantness (3.5 vs. 3.4, respectively $P < .01$), but scores on perceived neighborhood crime (3.4 for both) and perceived safe neighborhood traffic (3.1 vs. 3.2, respectively) were not significantly different between the two groups.



- Centers for Disease Control and Prevention (CDC). Perceptions of neighborhood characteristics and leisure-time physical inactivity--Austin/Travis County, Texas, 2004. *MMWR Morb Mortal Wkly Rep* 2005; 54(37):926-928.
- Catlin TK, Simoes EJ, Brownson RC. Environmental and policy factors associated with overweight among adults in Missouri. *Am J Health Promot* 2003; 17(4):249-258.
- U.S. Department of Health and Human Services, U.S. Department of Agriculture. *Dietary Guidelines for Americans*, 2005. 6th ed. Washington, DC: U.S. Government Printing Office; January, 2005.

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Data Points

RESULTS FROM THE CALIFORNIA WOMEN'S HEALTH SURVEY

The United States Department of Food and Agriculture (USDA) has developed a standardized methodology for measuring food insecurity and hunger. Food security is defined as having access, at all times, to enough food for an active, healthy life. Food insecurity is categorized as being either *without* hunger (i.e., having limited or uncertain availability of nutritionally adequate and safe food) or *with* hunger (i.e., having gone without food for one or more days during the previous 30 days because of insufficient money to buy food).¹

According to the USDA the degree of food insecurity reflects the emotional stress and anxiety experienced by women and the compromising behaviors they engage in to ensure they have enough food for their families such as choosing lower cost, less nutritious food, or choosing to buy food rather than paying for rent or medicine.

The California Women's Health Survey (CWHS) has collected information on food security since 1999 using an abbreviated, validated short version of the USDA's 18 item standardized scale. The short version consists of six questions about a woman's food supply based on monetary constraints. Each question that is answered positively increases the rated severity of food insecurity. Women with 0 or 1 response are rated as food secure, those with 2 to 4 positive responses are rated as food insecure without hunger, and those with 5 or 6 positive responses are rated as food insecure with hunger.

The CWHS indicates the following trends over the six-year period since 1999:

- Although the prevalence of food security among California women decreased significantly from 1999 to 2004 (78.3 percent vs. 73.4 percent respectively), the 2005 rate was 76.5 percent, possibly indicating that the trend is reversing.²
- Both degrees of food insecurity, while having increasing trends from 1999 to 2004 (although not statistically significant) showed a reversal in those trends with a decrease from 2004 to 2005 for both degrees of severity.
- Food insecurity without hunger decreased from 18.4 percent in 2004 to 15.4 percent in 2005.
- Food insecurity with hunger decreased slightly from 8.2 percent in 2004 to 8.0 percent in 2005.

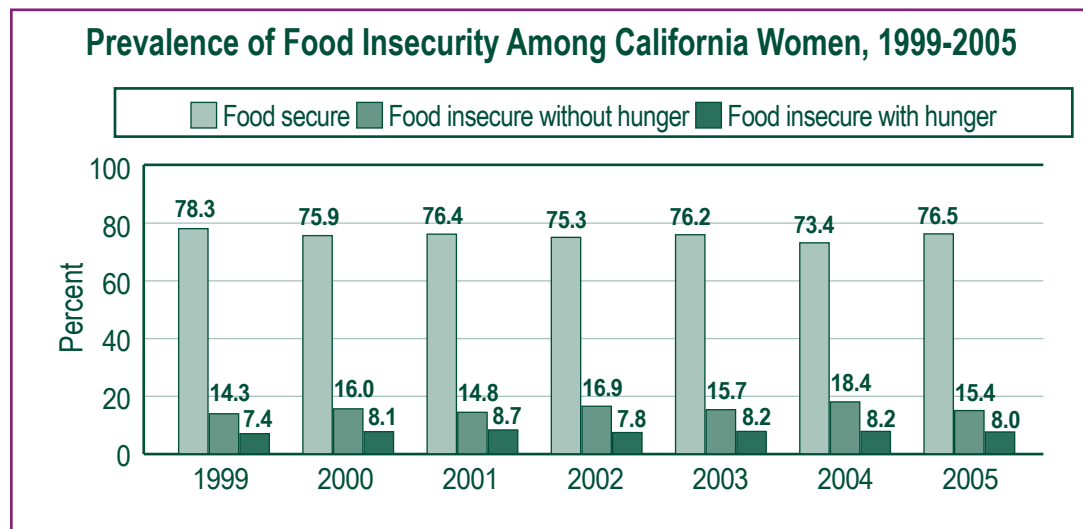
Trends in Food Security Among California Women 1999 to 2005

Department of Social Services
Research and Evaluation Branch

Public Health Message:
Both public and private supplemental food programs should be aware of a possible increasing percentage of food secure women in California and work to sustain this trend. Clear opportunities exist for additional research into the relationship between food security and health outcomes among California women.

Trends in Food Security Among California Women 1999 to 2005

Department of Social Services
Research and Evaluation Branch



- 1 Bickel G, Nord M, Price C, Hamilton W, Cook J. *A Guide to Measuring Household Food Security, Revised 2000*. USDA, Food and Nutrition Service, Office of Analysis, Nutrition and Evaluation, March 2000.
- 2 Trend was statistically significant using Least Squares Regression.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

The United States Department of Agriculture (USDA) defines **food security** as "having access, at all times, to enough food for an active healthy life," and **food insecurity** as the state of "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in a socially acceptable way." **Food insecurity with hunger** includes "the uneasy or painful sensation caused by a lack of food and/or the recurrent and involuntary lack of access to food." The Healthy People 2010 Goal is to reduce food insecurity from 12 percent in 1995 to 6 percent in 2010.¹

Both the Food Stamp Program and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provide families with cash assistance to supplement their food budgets. Both programs have income qualifiers and other requirements.^{2,3} Non-governmental sources of supplemental food can also be found through emergency food banks, food pantries, soup kitchens, and shelters, typically with few, if any, documentation requirements.

The 2005 California Women's Health Survey (CWHS) was administered to 4,539 women, using the USDA's standardized methodology for measuring food security with and without hunger.⁴ The six-item validated short form of the food security scale was used to classify women into three groups: food secure, food insecure without

hunger, and food insecure with hunger.¹ Respondents were also asked about household income and family size as well as questions about their use of federal food assistance programs and food banks during the previous 12 months. Household income and family size were used to calculate respondents' socioeconomic status using the federal poverty level as a measure.

OVERALL RATES

Among all respondents:

- Rates of **food insecurity** in 2004 were similar to those of 2005 (26.6 percent and 25.6 percent, respectively).
 - **Food insecurity without hunger** was 18.4 percent in 2004 and 16.9 percent in 2005
 - **Food insecurity with hunger** was 8.2 percent in 2004 and 8.7 percent in 2005.⁵

None of these differences were statistically significant, although the differences in food insecurity without hunger between 2004 and 2005 approached significance (chi-square test, $P < 0.06$).

WOMEN WITH LOW INCOMES

An analysis of the 1,335 women who had complete data and lived in households with a reported income that was less than or equal to 200 percent of the federal poverty level (FPL) revealed the following:

Food Insecurity among Low-Income California Women and Use of Supplemental Food Sources, 2005

California Department of Public Health
Cancer Prevention and Nutrition Section

Public Health Message:

Food insecurity remains a pressing problem among low-income California women, including those using both regular and emergency supplemental food sources. The USDA ranks California 50th among all states for food stamp participation level. Efforts need to be directed towards increasing participation among women with low incomes and their families. These findings further highlight the importance of providing low-income women, including those not participating in the WIC or food stamp programs, with nutrition education that emphasizes ways to acquire healthy food at affordable prices. This study reinforces the need for innovative programs, such as the WIC Farmers' Market and community gardens, which serve as low-cost sources of nutritious food for women in need.

Food Insecurity among Low-Income California Women and Use of Supplemental Food Sources, 2005

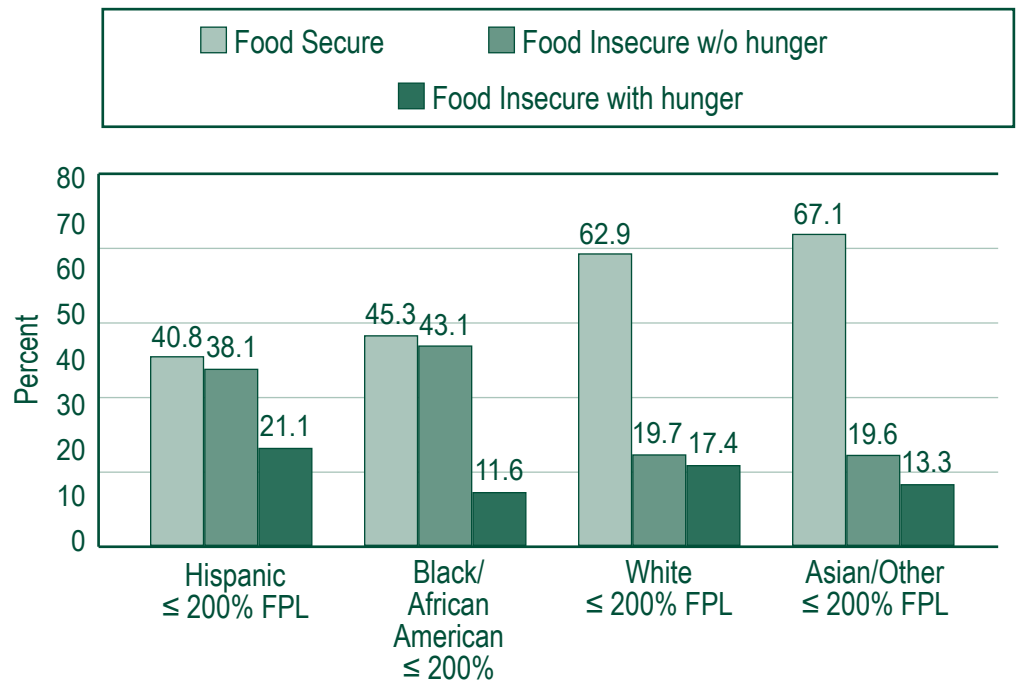
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Cancer Prevention and
Nutrition Section

- Over half of the women in households with low incomes reported being **food insecure** in both years
 - **Food insecurity without hunger** was found in 35.9 percent of low-income respondents in 2004 and 31.6 percent in 2005 (chi-square test, $P < .02$)
 - **Food insecurity with hunger** was found in 17.6 percent in 2004 and 19.1 percent in 2005.
- **Food security** was reported by 46.5 percent of low-income respondents in 2004 and 49.3 percent in 2005.
- Racial disparities were evident. Among low-income women, nearly 60 percent of Hispanics and 54.7 percent of Black/African-Americans reported food insecurity. Asian/Others and Whites were significantly less likely to report food insecurity (32.9 percent and 37.1 percent, respectively) (chi-square test, $P < .0001$).
- The household income threshold to qualify for the Food Stamp Program is 130 percent of the FPL and is 185 percent for WIC. Among the 1,335 California women living in households with incomes at or below 200 percent of the FPL, 839 respondents met the first criteria and 1,303 met the second, but only 15.1 percent of all low-income respondents (202 respondents) participated in the Food Stamp Program, and 21.0 percent (280) participated in the WIC Program within the previous year. (Respondents' participation in the WIC program may have included a woman's children under age 5 years as well as herself.)
- Low-income women who were not making use of supplemental food assistance programs were also at risk of food insecurity.
 - Two-thirds of the 202 low-income women who participated in the Food Stamp Program reported being food insecure (with or without hunger), while just under half (48.5 percent) of those who did not participate in the program reported being food insecure (chi-square test, $P = .0004$).
 - Almost two-thirds (64.2 percent) of the 280 low-income participants in the WIC program reported food insecurity, while just under half (46.6 percent) of non-participants reported food insecurity (chi-square test, $P < .0001$).
 - Women who made use of non-governmental food banks were at greatest risk for food insecurity. Although total participation was low (7.8 percent, or 105 women), more than three-quarters reported food insecurity, and 50.9 percent (51 women) reported food insecurity with hunger.

**Food Insecurity
among Low-Income
California Women and
Use of Supplemental
Food Sources, 2005**

California Department of
Public Health
Cancer Prevention and
Nutrition Section

**Food Security Among Low-Income California Women,
By Race/Ethnicity**



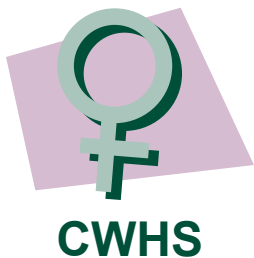
Source: California Women's Health Survey, 2005

**Food Insecurity
among Low-Income
California Women and
Use of Supplemental
Food Sources, 2005**

California Department of
Public Health
Cancer Prevention and
Nutrition Section

- 1 US Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: US Government Printing Office; November 2000.
- 2 To participate in the Food Stamp Program, a person must live in a household at or below 130 percent of the federal poverty level (e.g., \$20,917.00 for a family of three in 2005), provide extensive documentation, and be re-certified 4 times each year. Any foods can be purchased.
- 3 To participate in the WIC program, a woman must be pregnant, breastfeeding, or postpartum or have children younger than age 5 who are at nutritional risk. In addition, the woman must live in a household at or below 185 percent of the federal poverty level (e.g., \$29,766.50 for a family of three in 2005). Documentation is not extensive. Proof of residency is the only documentation required except income, and re-certification takes place at 6-month intervals or for the duration of a pregnancy. Only foods on the WIC approved food package list can be purchased.
- 4 Bickel G, Nord M, Price C, Hamilton W, Cook J. *Guide to Measuring Household Food Security, Revised 2000*. Alexandria VA: US Department of Agriculture, Food and Nutrition Service; March 2000.
- 5 Baumrind N, Dumbauld S. *Trends in Food Security Among California Women, 1999 to 2004*. Data Points 2003-2004. Sacramento, CA: Office of Women's Health, California Department of Health Services; 2006.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

Although it is well known that child abuse is associated with both physical and mental health consequences,¹ less attention has been focused on other adverse childhood experiences such as familial substance abuse, mental illness and domestic violence. Research suggests that adverse childhood experiences are common and are associated with a variety of physical and mental health problems in adulthood,² including alcoholism, drug abuse, depression, sexually transmitted disease, physical inactivity, obesity, ischemic heart disease, and cancer.

The 2005 California Women's Health Survey (CWHS) assessed both child abuse and childhood household dysfunction among California women.

CHILD ABUSE

To assess **physical abuse during childhood**, women were asked: *"Before the age of 18, did anyone ever beat you up, such as slap, punch, or kick you, or attack you?"*

To assess **sexual abuse during childhood**, women were asked: *"Before the age of 18, did anyone ever force you into unwanted sexual activity by using force or threatening to harm you?"*

To assess **emotional abuse during childhood**, women were asked: *"Before the age of 18, did a parent or other adult in your household often or very often swear at, insult, or put you down, or make you afraid that you would be physically hurt?"*

Women who reported experiencing physical, sexual or emotional abuse as a child were considered to be exposed to child abuse.

HOUSEHOLD DYSFUNCTION

To assess household dysfunction during childhood, women were asked: *"Before the age of 18, did you live with someone who was a problem drinker or someone who used street drugs, or someone who was depressed or mentally ill, or someone who went to prison or jail?"*

"Before your 18th birthday, did you see anyone treat your mother (or stepmother) violently, such as beat her up, hit, punch, throw something at her, threaten or attack her?"

Women who answered "Yes" to any of the above items were coded positive for childhood household dysfunction.

The CWHS also assessed factors that may be associated with adverse childhood events such as whether the family received public assistance. Information about receiving public assistance in the past was gathered by asking the following question: *"Before the age of 18, did your family receive public assistance sometimes called Welfare, Aid for Families with Dependent Children (AFDC), California Work Opportunity and Responsibility to Kids (CalWORKs), or Temporary Assistance for Needy Families (TANF)?"*

Highlights of this survey are as follows:

- At least one type of **household dysfunction** was reported as having been experienced during childhood by 34.7 percent of respondents.
- 21.0 percent reported having a household member who was a problem drinker or someone that used street drugs.

History of Adverse Childhood Experiences and Household Dysfunction Among California Women, 2005

National Center for Post Traumatic Stress Disorder, VA Palo Alto Health Care System

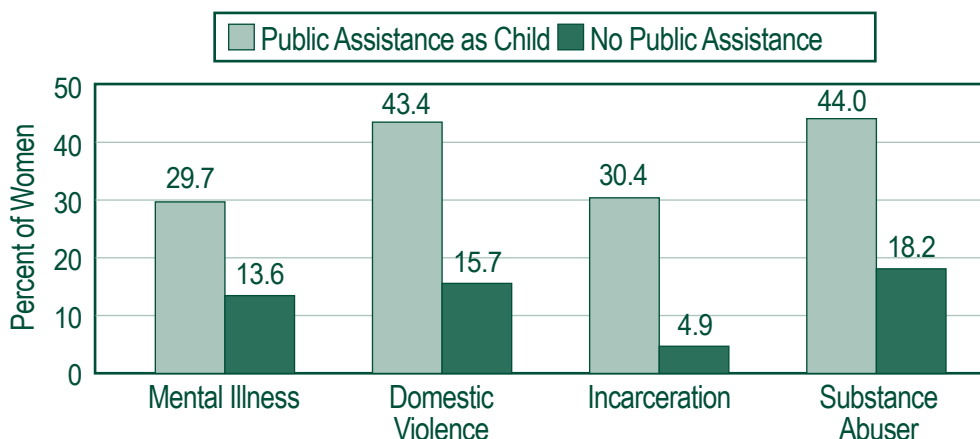
Public Health Message: Significant household dysfunction is associated with child abuse and is more prevalent among women whose families participated in public assistance programs when they were children. Services to assist families with household dysfunction, including those to prevent and treat child abuse and neglect, could be especially targeted to families that receive public assistance.

History of Adverse Childhood Experiences and Household Dysfunction Among California Women, 2005

National Center for Post Traumatic Stress Disorder, VA Palo Alto Health Care System

- 18.6 percent reported seeing their mother or stepmother treated violently.
- 15.3 percent reported having a household member who was depressed or mentally ill.
- 7.6 percent reported having a household member who went to prison or jail.
- Women who grew up in dysfunctional households were more likely to have experienced **child abuse** than women who did not grow up in dysfunctional homes (57.0 percent vs. 12.8 percent).
- Women who grew up in dysfunctional households were more likely to have **received public assistance** compared to women who did not grow up in dysfunctional households (20.4 percent vs. 5.6 percent).

History Among California Women of Household Dysfunction and Receiving Public Assistance During Childhood



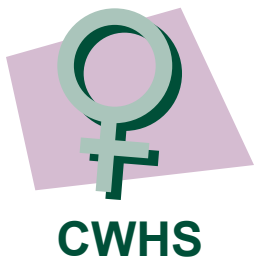
Household Dysfunction Experienced During Childhood (Before Age 18)

Mental illness defined as having lived with someone who was depressed or mentally ill.
Domestic violence defined as having seen mother or stepmother treated violently, such as beaten up, hit, punched, had an object thrown at her, or threatened or attacked.
Incarceration defined as having lived with someone who went to prison or jail.
Substance abuser defined as having lived with someone who was a problem drinker or used street drugs.
Public assistance defined as household having received public assistance.

Source: California Women's Health Survey, 2005

1. Arias I. The legacy of child maltreatment: Long-term health consequences for women. *J Womens Health (Larchmt)* 2004;13(5):468-473.
2. Felitti VJ, Anda RF, Nordenberg D, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med* 1998;14(4):245-258.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

Child abuse is a highly prevalent problem with serious social costs.¹ Physical and sexual abuse of children may not only lead to a wide range of negative health outcomes, but is also associated with a higher risk of physical and sexual abuse in adulthood.² Women who had been abused as children and experience repeat victimization as adults are also at greater risk for serious mental health consequences.³

The 2005 California Women's Health Survey (CWHS) assessed the prevalence of child abuse (defined as physical or sexual abuse before age 18), adult assault (defined as physical or sexual assault experienced at age 18 or older), and revictimization (defined as having experienced both child abuse and adult assault) among women.

To assess **child physical abuse**, women were asked: "Before the age of 18, did anyone ever beat you up, such as slap, punch, or kick you, or attack you?"

To assess **child sexual abuse**, women were asked: "Before the age of 18, did anyone ever force you into unwanted sexual activity by using force or threatening to harm you?"

To assess **adult physical assault**, women were asked: "After the age of 18, did anyone ever beat you up, such as slap, punch, or kick you, or attack you?"

To assess **adult sexual assault** women were asked: "After the age of 18, did anyone ever force you into unwanted sexual activity by using force or threatening to harm you?"

Highlights of the survey are as follows:

- At least one form of **child abuse** (physical or sexual) was reported as having been experienced by 23.7 percent of respondents.
 - 19.1 percent reported experiencing **physical abuse**.
 - 10.9 percent reported experiencing **sexual abuse**.
- At least one form of **adult assault** (physical or sexual) was reported as having been experienced by 22.4 percent of respondents.
 - 19.3 percent reported experiencing **physical abuse**.
 - 10.4 percent reported experiencing **sexual abuse**.
- **Revictimization** (experiencing both child abuse and adult assault) was reported as having been experienced by 11.6 percent of respondents.
- Child abuse and adult assault were strongly associated: 48.8 percent of the women with a history of child abuse experienced adult physical or sexual assault, compared to 14.2 percent of women with no history of child abuse.

History of Child Abuse and Adult Victimization Among California Women, 2005

National Center for Post Traumatic Stress Disorder, VA Palo Alto Health Care System

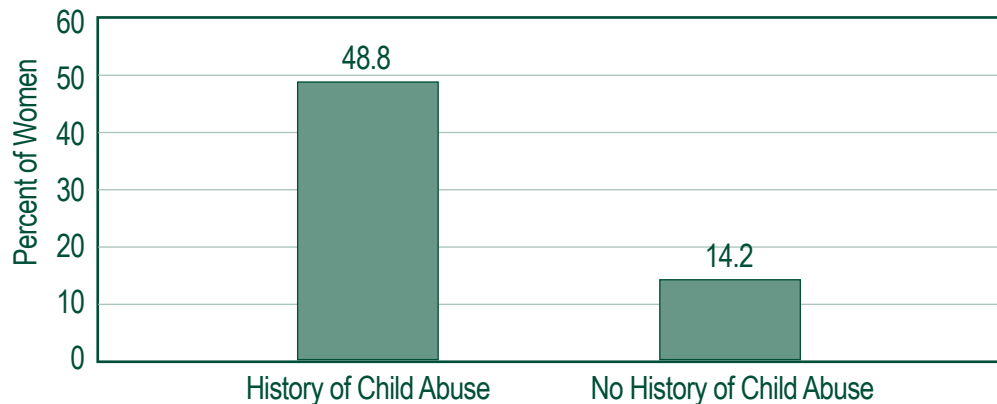
Public Health Message:

A number of theories may explain why women who are victimized as children are at increased risk for being revictimized as adults, including social learning, learned helplessness, stigmatization, low self-esteem, and symptoms of psychopathology.³ Prevention and treatment interventions for child abuse survivors that address underlying mechanisms may reduce violence against women and its associated health consequences.

History of Child Abuse and Adult Victimization Among California Women, 2005

National Center for Post Traumatic Stress Disorder,
VA Palo Alto Health Care System

History of Adult Assault Among Women With and Without a History of Child Abuse



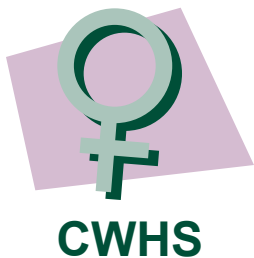
Child abuse defined as experiencing physical or sexual abuse before age 18.

Adult assault defined as experiencing physical or sexual assault at age 18 or older.

Source: California Women's Health Survey, 2005

- 1 Administration on Children, Youth, and Families. *Child Maltreatment 2003*. Washington, DC: Government Printing Office; 2005.
- 2 Desai S, Arias I, Thompson MP, Basile KC. Childhood victimization and subsequent adult revictimization assessed in a nationally representative sample of women and men. *Violence Vict* 2002;17(6):639-653.
- 3 Messman TL, Long PJ. Child sexual abuse and its relationship to revictimization in adult women: A review. *Clin Psychol Rev* 1996;16(5):397-420.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

The California Health and Safety Code defines domestic violence as "infliction or threat of physical harm against past or present adult or adolescent female intimate partners, and shall include physical, sexual, and psychological abuse against the woman, and is a part of a pattern of assaultive, coercive, and controlling behaviors directed at achieving compliance from, or control over, that woman."

In the United States, approximately 1.5 million women are physically assaulted or raped by an intimate partner each year.¹

The relationship between alcohol or substance abuse and domestic violence is complex. Misusing drugs or alcohol may not directly cause violence, but may increase the risk of violence. Alcohol and drug abuse may also be a consequence of victimization. Several research studies have associated heavy drinking and drug use with violence between intimate partners.²⁻⁵ Studies show that in 45 percent of domestic violence cases, men had been drinking, and in about 20 percent of cases, women had been drinking.⁶ Alcohol abuse is also correlated with severity of battering.⁷

Treating alcohol and drug dependence along with trauma (including domestic violence) appear more effective than addressing domestic violence alone for individuals with these multiple issues.⁸

Since 1996, the California Department of Health Services has administered the

Battered Women's Shelter Program, currently funding 94 agencies to provide domestic violence-related services to battered women and their children. In addition to emergency shelter, the programs provide counseling, legal services, transitional housing, and other support services.

Women experiencing domestic violence often present to service providers with multiple issues, including alcohol, drug abuse and/or mental health problems. Service providers have anecdotally reported difficulties helping women who are both victims of domestic violence and have alcohol or drug abuse problems.

This report describes findings from the California Women's Health Survey (CWHS) on domestic violence as well as alcohol and, drug abuse among California women age 18 and older. In 2004 and 2005, respondents were asked about their experience with domestic violence as well as their alcohol use. In 2005, women who reported physical or sexual abuse or stalking were also asked whether alcohol or drugs were involved in those incidents. Survey questions on domestic violence focused on:

- Physical violence-whether in the previous 12 months an intimate partner threw something at the respondent; or pushed, kicked, beat, or threatened her with (or used) a knife or gun or forced sex.

Alcohol and Drug Abuse Issues for California Women Experiencing Domestic Violence, 2004-2005

California Department of Public Health
Maternal, Child and Adolescent Health/Office of Family Planning Branch

Public Health Message:
Women experiencing domestic violence may benefit from: (1) domestic violence service providers who are trained to recognize and be sensitive to women affected by alcohol or substance abuse; and (2) programs that provide formal linkages between domestic violence services and alcohol and drug abuse treatment.

Alcohol and Drug Abuse Issues for California Women Experiencing Domestic Violence, 2004-2005

California Department of
Public Health
Maternal, Child and
Adolescent Health/Office of
Family Planning Branch

- Psychological abuse-whether in the previous 12 months the respondent was frightened, controlled or followed by an intimate partner.

Women who responded “Yes” to any of the questions regarding domestic violence were categorized into two groups: those who responded positively to any of the physical or sexual abuse questions, and those who responded positively to only psychological abuse questions.

Survey questions also assessed the respondents’ alcohol use during the previous 30 days. Women who reported consuming five or more drinks on any occasion in the previous 30 days were classified as binge drinkers.

Data from both survey years were combined, forming a sample of 9,180 women. Results from the 7,703 respondents who completed questions on both domestic violence and alcohol use are as follows:

- At least one incident of domestic violence over the previous 12 months was reported by 9.2 percent of women respondents.
 - Half of this group (4.6 percent) reported physical or sexual violence or both. Many in this group also reported psychological abuse.
 - The other half (4.6 percent) reported psychological abuse, but no physical or sexual abuse.

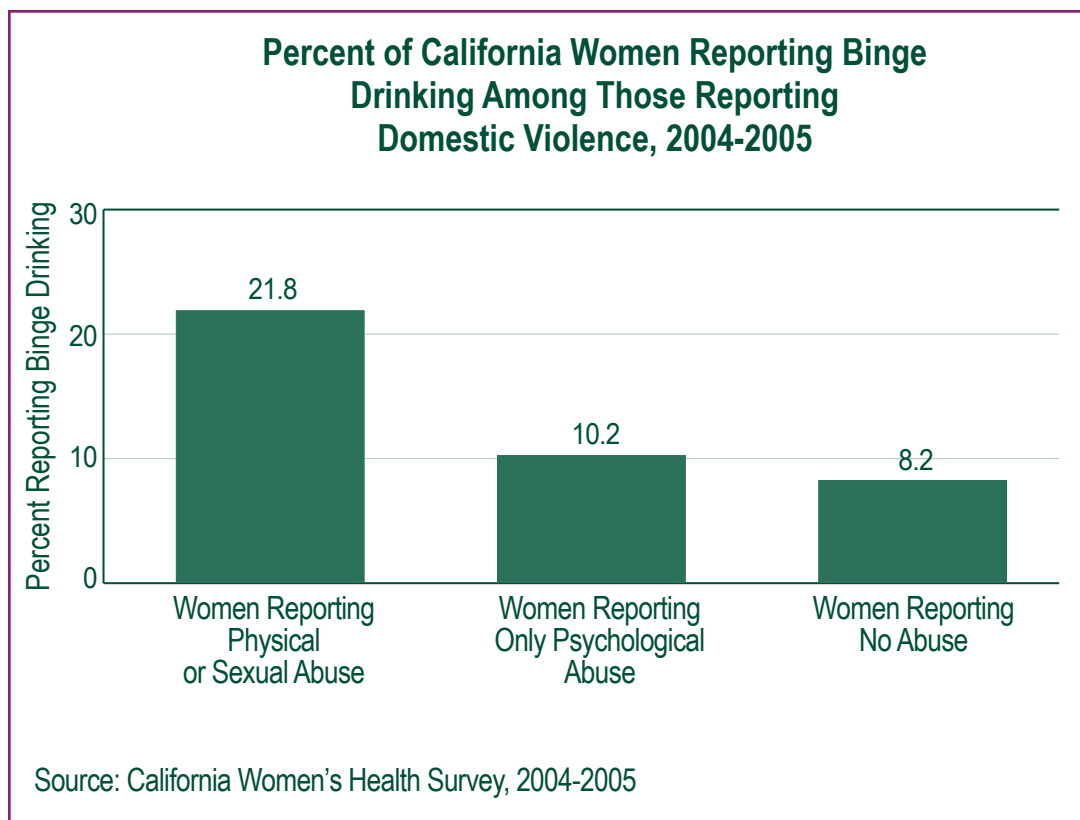
- Binge drinking in the previous 30 days was identified in 8.9 percent of women respondents.
 - Binge drinking was identified at nearly twice the rate among women reporting any type of domestic violence, compared with those reporting no domestic violence (15.8 percent vs. 8.2 percent, respectively) in the previous 12 months.
 - Binge drinking was identified in more than twice as many women who reported physical or sexual domestic violence, compared with those reporting psychological abuse only (21.8 percent vs. 10.2 percent, respectively).

The 2005 survey question about alcohol or drug involvement associated with domestic violence was asked only of respondents who positively answered a question regarding physical or sexual abuse or stalking (n = 158). The question did not differentiate as to whether they or their partners had been involved in the alcohol or substance abuse.

- Of women who reported experiencing domestic violence (physical or sexual abuse or stalking) over the previous 12 months, 39.5 percent also reported that alcohol or drugs were involved in at least one incident.

Alcohol and Drug Abuse Issues for California Women Experiencing Domestic Violence, 2004-2005

California Department of Public Health
Maternal, Child and Adolescent Health/Office of Family Planning Branch



***Alcohol and Drug
Abuse Issues for
California Women
Experiencing
Domestic Violence,
2004-2005***

California Department of
Public Health
Maternal, Child and
Adolescent Health/Office of
Family Planning Branch

- 1 Centers for Disease Control and Prevention. Intimate Partner Violence: Overview. US Department of Health and Human Services; August 26, 2006. Available at: <http://www.cdc.gov/ncipc/factsheets/ipvfacts.htm>.
- 2 Leonard KE. Drinking Patterns and Intoxication in Marital Violence: Review, Critique, and Future Directions for Research. In: Martin SE, ed. Alcohol and interpersonal violence: Fostering multidisciplinary perspectives. National Institute on Alcohol Abuse and Alcoholism (NIAAA) Research Monograph No. 24. National Institutes of Health (NIH) Publication No. 93-3496. Rockville, MD: The Institute, 1993:253-280.
- 3 Lipsky S, Caetano R, Field CA, Larkin GL. Is there a relationship between victim and partner alcohol use during an intimate partner violence event? Findings from an urban emergency department study of abused women. *J Stud Alcohol* 2005; 66(3):407-412.
- 4 El-Bassel N, Gilbert L, Wu E, Go H, Hill J. Relationship between drug abuse and intimate partner violence: A longitudinal study among women receiving methadone. *Am J Public Health* 2005; 95(3):465-470.
- 5 Thompson MP, Kingree JB. The roles of victim and perpetrator alcohol use in intimate partner violence outcomes. *J Interpers Violence* 2006; 21(2):163-177.
- 6 Roizen J. Issues in the Epidemiology of Alcohol and Violence. In: Martin SE, ed. Alcohol and interpersonal violence: Fostering multidisciplinary perspectives. National Institute on Alcohol Abuse and Alcoholism (NIAAA) Research Monograph No. 24. National Institutes of Health (NIH) Publication No. 93-3496. Rockville, MD: The Institute, 1993:3-36.
- 7 Clark AH, Foy DW. Trauma exposure and alcohol use in battered women. *Violence Against Women* 2000; 6(1):37-48.
- 8 Becker MA, Noether CD, Larson MJ, et al. Characteristics of women engaged in treatment for trauma and co-occurring disorders: Findings from a national multisite study. *J Community Psychol* 2005; 33(4):429-433.

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Data Points

RESULTS FROM THE 2005 CALIFORNIA WOMEN'S HEALTH SURVEY

Sexual violence (SV) was not always considered a public health problem. Most intervention programs fell under the category of crime prevention. But SV is not just a single traumatic episode, and it is more than simply a crime. SV is a broader social and health problem that includes incest, child sexual abuse, rape, and other abusive behaviors. Researchers are now finding that adverse childhood events such as sexual abuse lead to a range of emotional and health consequences for the victims, including chronic diseases,¹ emotional and functional disability,² a tendency to engage in harmful behaviors,³ and difficulties in intimate relationships.⁴ Women who were raped before age 18 are also more likely to be raped again as adults.⁵

Stopping SV is critical to preventing these long-term consequences. Public health surveillance plays an important role by describing how often SV occurs and who is most at risk. Unfortunately, data on SV is difficult to obtain, because rape is highly underreported: data from the United States Department of Justice indicate that only 36 percent of rapes and sexual assaults were reported to law enforcement in 2004.⁶

The California Women's Health Survey (CWHS) provides a valuable data source to examine the problem of SV. In 2001-2005, the California Department of Social Services sponsored two questions that asked respondents whether anyone had: "...forced you into unwanted sexual activity by using force or threatening to harm you since the age of 18," or

"...forced you into unwanted sexual activity by using force or threatening to harm you before the age of 18."

In 2005, the California Department of Health Services, EPIC Branch, Rape Prevention and Education Program added a question to the survey that asked respondents whether any forced sexual activity since age 18 occurred in the previous 12 months.

In 2005, 4,023 women responded to these survey questions. The data were weighted to the California population for age and race/ethnicity based on the 2000 Census. Incomplete surveys were excluded.⁷

Responses indicating that SV had occurred in childhood and adulthood were not mutually exclusive (respondents could answer "Yes" to both questions). Responses were combined to show how many respondents had been forced to have sex at any point during their lives.

Were you forced to have sex ...	"Yes"	Estimated Number of California Women
as a child?	11%	1,166,000
as an adult?	10%	1,120,000
sometime in your life?	17%	1,862,000
in the past 12 months?	0.7%	71,000

Black/African American women reported the highest rate of SV during childhood (19 percent), followed by Whites (11.6 percent), Hispanics (9.2 percent), and Asians/Others (6.7 percent). Similarly, Black/African American women reported the highest rate of SV in adulthood (14.7 percent), followed by Whites (11.4 percent), Asians/Others (8.8 percent), and Hispanics (7.8 percent). Asian/Other women were the only race/ethnicity group who reported higher rates of SV during adulthood than during childhood.

Sexual Violence in California, 2005

California Department of Public Health, Epidemiology and Prevention for Injury Control Branch

Public Health Message:

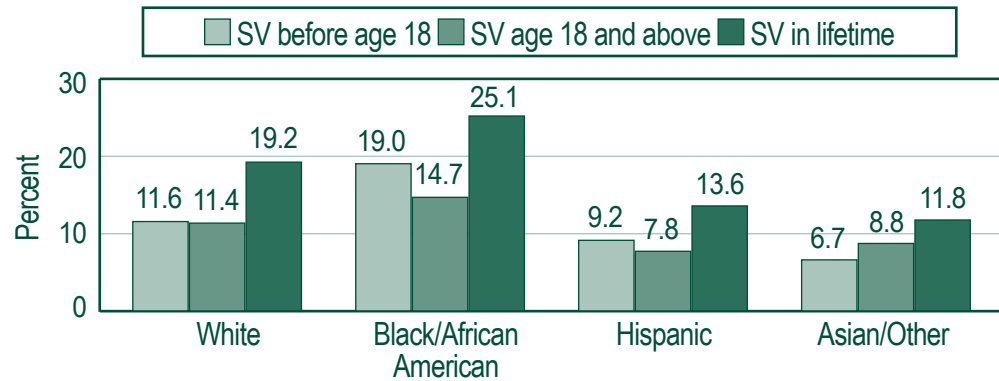
Nearly one in six California women reports having suffered sexual violence. This means that nearly two million California women victimized by SV are at risk of the severe physical and emotional health consequences of this violence. Surveillance data from sources such as the CWHS are crucial for understanding the dimensions of this threat to women's well-being. Knowledge about who is at highest risk provides the basis for policies that can alleviate the threat of SV. Such findings represent a small step in the direction of revealing a large, but largely hidden, public health problem.

Sexual Violence in California, 2005

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for Injury Control Branch

Overall, these findings are consistent with studies in other times and places. In California as elsewhere, SV threatens the health and well-being of females regardless of race, ethnicity or age.

Sexual Violence Victimization, by Race/Ethnicity, California 2005



Source: California Women's Health Survey, 2005

- 1 Felitti VJ, Anda RF, Nordenberg D, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med* 1998;14(4):245-258.
- 2 Walker EA, Gelfand A, Kelfand A, et al. Adult health status of women with histories of childhood abuse and neglect. *Am J Med* 1999;107(4):332-339.
- 3 Dube SR, Anda RF, Whitfield CL, et al. Long-term consequences of childhood sexual abuse by gender of victim. *Am J Prev Med* 2005;28(5):430-438.
- 4 Fleming J, Mullen PE, Sibthorpe B, Bammer G. The long-term impact of childhood sexual abuse in Australian women. *Child Abuse Negl* 1999;23(2):145-159.
- 5 Tjaden P, Thoennes N. *Extent, Nature, and Consequences of Rape Victimization: Findings from the National Violence Against Women Survey*. Bureau of Justice Statistics, Washington, DC: US Department of Justice; 2006.
- 6 Catalano SM. *Criminal Victimization, 2004*. Bureau of Justice Statistics. National Crime Victimization Survey. Washington, DC: US Department of Justice. Government Printing Office; 2005. Publication No. NCJ210674. <http://www.ojp.usdoj.gov/bjs/pub/pdf/cv04.pdf>.
- 7 Incomplete surveys accounted for 13 percent of the total sample, representing about 1.7 million California women. The vast majority of incomplete surveys lacked SV data, but those that did were more than 30 percent more likely to have positive answers for the SV questions than the completed surveys. It is reasonable to conclude that women who did not complete the survey were more likely to have been sexually victimized.

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